LAND USE
FOR THE YEAR
2000

DEVELOPMENT ALTERNATIVES

MADISON, ST.CLAIR, MONROE COUNTIES

ILLINOIS

AUG. 26th 1818

ILLINOIS STATE LIBRARY
SPRINGFIELD

3

93447029 6

ILLINOIS DOCUMENTS

OCT 21 1974

ILLINOIS STATE LIBRARY

SOUTHWESTERN ILLINOIS
METROPOLITAN AND REGIONAL
PLANNING COMMISSION

EXECUTIVE COMMITTEE

President
ALFRED N. YOUNG

Vice-President
JACK FRANDSEN

Secretary
EDWARD G. HOLZWEG

Treasurer
CHARLES G. CHENOWETH

Executive Director
THEADORE H. MIKESELL

NELSON HAGNAUER

JOHN BELLCOFF

HENRY BLOME

LEROY MARKS

ROBERT GARDNER

ELMER PRANGE

RUTH GILSTER

WAYNE ENNEN

LESTER CAMPBELL

7437039

ILLINOIS STATE LIBRARY
3 1129 00641 163 1

ABSTRACT

TITLE: LAND USE FOR THE YEAR 2000, DEVELOPMENT ALTERNATIVES MADISON, ST. CLAIR AND MONROE COUNTIES, ILLINOIS

AUTHOR: Southwestern Illinois Metropolitan and Regional Planning Commission

DATE: August, 1974

REPORT NUMBER: SWIL-MAPC 74-02

NO. OF PAGES: 136

ABSTRACT:

This report presents a year 2000 land use development plan for Madison, St. Clair and Monroe Counties, Illinois. The land use plan is based on an analysis of the region's physical and socio-economic characteristics, and reflects an extension of existing population, employment, and development trends. The plan is intended to serve as a guide for the region's future growth, and also as a uniform planning basis for the continuous update and review of intra-regional comprehensive and functional plans. Therefore, every attempt has been made to coordinate the previous efforts of the many organizations engaged in planning activities in this three-county region.

This report also presents a conceptualized alternative growth pattern. The conceptual alternative considers the possible impacts of a number of still speculative development proposals, and presents schematically the probable alterations in projected land use which could result from their implementation.

Digitized by the Internet Archive
in 2017 with funding from
University of Illinois Urbana-Champaign Alternates

https://archive.org/details/landuseforyear2000sout

LAND USE FOR THE YEAR 2000
DEVELOPMENT ALTERNATIVES

MADISON, ST. CLAIR AND MONROE COUNTIES, ILLINOIS

Prepared By

SOUTHWESTERN ILLINOIS METROPOLITAN AND REGIONAL PLANNING COMMISSION
203 West Main Street Collinsville, Illinois 62234

August, 1974

The preparation of this report was financed, in part, through a comprehensive planning grant from the Department of Housing and Urban Development under a contract with the Illinois Department of Local Government Affairs.

TABLE OF CONTENTS

Page

CHAPTER I INTRODUCTION 1

Purpose of the Study 1
Scope of the Study 2
Method of Approach 2
Limitations of the Study 5

CHAPTER II PHYSICAL BASIS FOR PLANNING 7

Geologic History 7
Physical Description 9
Land Potential for Urban Development 14

CHAPTER III ECONOMY 17

Historical Overview 17
Present and Projected Economy 20
Economic Outlook 31
Economic Development Activities 37
Project Potentialities 38

CHAPTER IV POPULATION 41

Past Trends 41
Present Population Profile 44
Future Population 47

CHAPTER V LAND USE PLAN 53

Methodology 53
Development Trends 59
Land Use Plan for the Year 2000 66

Page

CHAPTER VI ALTERNATIVE CONSIDERATIONS 75

Potential Development Projects 75
Summary and Conclusions 92

APPENDIX A SOCIO-ECONOMIC CHARACTERISTICS OF THE POPULATION - MADISON, ST. CLAIR AND MONROE COUNTIES A-1

APPENDIX B POPULATION PROJECTIONS - 1975-2010 MADISON, ST. CLAIR AND MONROE COUNTIES B-1

APPENDIX C INDUSTRIAL LAND AVAILABILITY - MADISON, ST. CLAIR AND MONROE COUNTIES C-1

APPENDIX D BIBLIOGRAPHY D-1

LIST OF TABLES

No. Page

4.1 Projected Population Increases for Madison, St. Clair and Monroe Counties - 1970-2000 50

5.1 Urban and Regional Park Standards 58

5.2 Existing Generalized Land Use Data Madison, St. Clair and Monroe Counties 61

5.3 General Urban Requirements - 2000 Madison, St. Clair and Monroe Counties 67

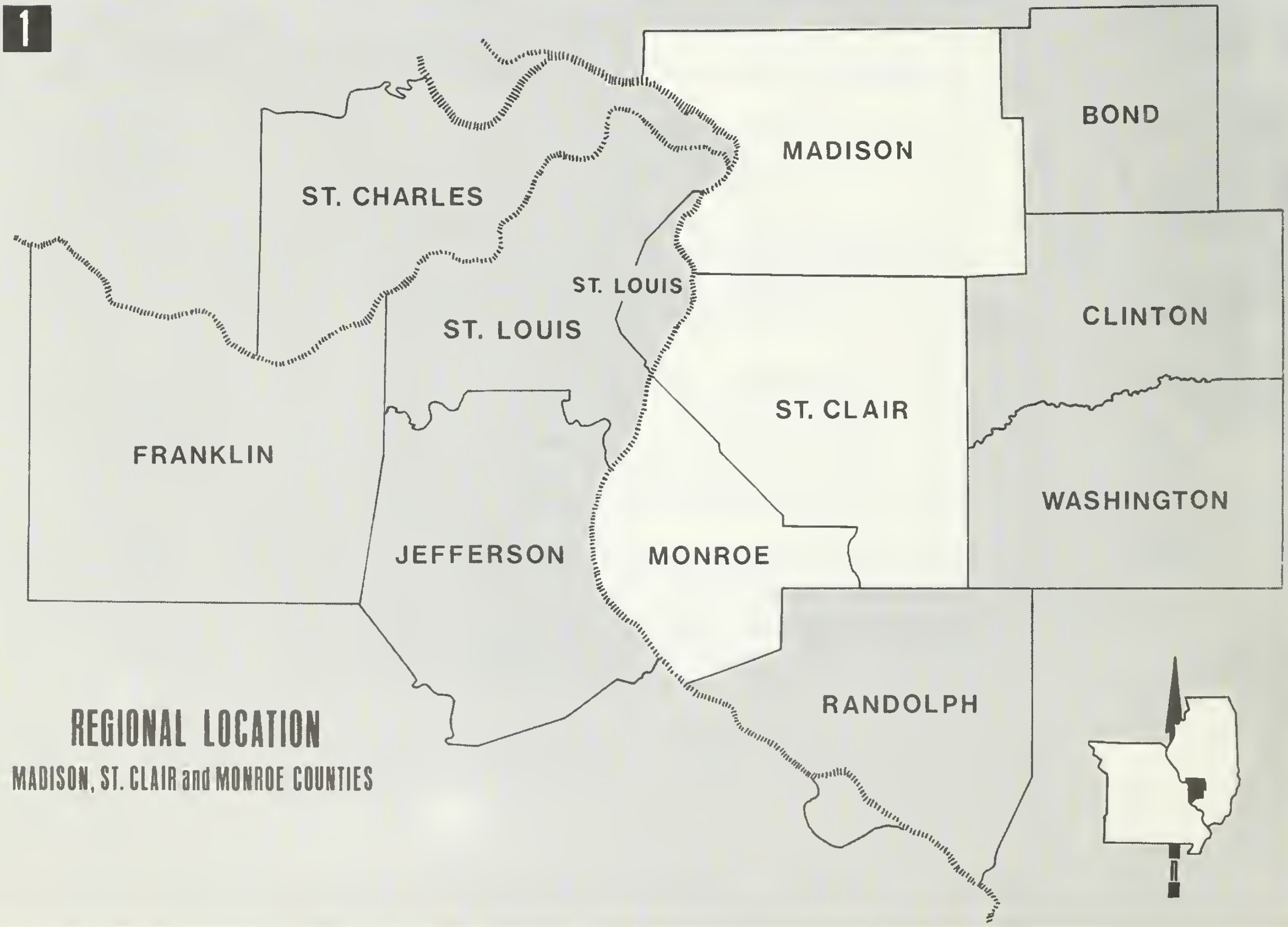
5.4 Short-Range Major Highway Improvements 5-Year Program 70

5.5 Long-Range Major Highway Improvements 20-Year Program 71

LIST OF ILLUSTRATIONS

No.		Page
1	Regional Location	viii
2	Severe Slopes and Karst Topography	11
3	Soil Limitations Affecting Construction	12
4	Land Potential for Urban Development - 2010	15
5	Percentage Distribution of Total Product	19
6	Freight Transportation Accessibility	32
7	Mississippi Waterways	33
8	Population Density - 1970	43
9	1970 Age-Sex Distribution	45
10	Projected Population Density - 2000	51
11	Concepts of Land Use Classification	55
12	Land Use Plan - 2000	Inside Back Cover
13	Alternative Growth Pattern: Regional Development Impact Maximization	77
14	Kaskaskia Development Concept	81
15	Port Development Concept	82
16	Recreation-Education Complex	83
17	Railroad Relocation Proposal	85
18	Riverfront Redevelopment Concept	87
19	Core Area Redevelopment Concept	89

plate 1



REGIONAL LOCATION
MADISON, ST. CLAIR and MONROE COUNTIES

I. INTRODUCTION

The comprehensive planning process provides a systematic method of analyzing data; applying goals, objectives and assumptions; and arriving at a desirable plan for future development. Given different analyses of basic data and different goals, objectives or assumptions, two planning programs may develop entirely different plans. This presents a problem for any area which has several different planning bodies. The urbanized portion of the Southwestern Illinois Region, composed of Madison, St. Clair and Monroe Counties (see Plate 1), is experiencing this problem. There are many variables which have a potential impact on development in this three-county area. Different planning organizations which are operating here have considered different impact variables and have made different assumptions about development, resulting in various plans and projections which are not entirely in agreement.

Due to this situation, there is no generally agreed upon physical development plan for this area which provides a uniform basis by which to judge future local and regional needs. More specifically, there is no overall plan to guide the preparation, review, or updating of community, individual county or specialized functional plans. There is also at present no uniformly accepted basis for analyzing and reviewing applications generated from this region for Federal or State financial assistance to local units of government.

PURPOSE OF THE STUDY

The purpose of this study is to combine and coordinate the recommendations of plans and projections of different planning bodies in an attempt to help rectify these problems. The Southwestern Illinois Metropolitan and Regional Planning Commission's (SIMAPC) general purposes, as defined by statute, are in part as follows:

(1) To prepare, maintain and amend a comprehensive development plan for the region;

(2) To conduct research into the factors affecting future development; and

(3) To assist local units of government in preparing plans.

The coordination of planning efforts pursued by this study is a step toward the fulfillment of these Commission purposes.

More specific purposes and intents of this study include the presentation of a technical recommendation as to how existing individual county plans can be made compatible with general population projections developed initially by the State of Illinois, with recommended metropolitan-wide land use plans prepared by the East-West Gateway Corodinating Council, with related single-purpose functional plans (such as for water-sewer, parks and recreation, etc.) and with previously adopted community plans. This study also identifies and assesses the potential impact of several distinct local and regional variables on future development and growth within the region. The resulting development pattern is presented as the technical base from which individual jurisdiction development plans might be updated and refined for formal adoption and implementation by the respective governments.

The information, analysis, recommendations and graphic presentations contained in this report are intended to be used in other functional and general planning programs of SIMAPC. This study will provide a guideline with which to evaluate their products. The document also illustrates the need for continued monitoring of development factors and updating of development plans as the regional impact variables identified herein become realities. Furthermore, it presents an assessment of development trends in the Illinois portion of the St. Louis Metropolitan Area which can be incorporated into metropolitan-wide planning programs.

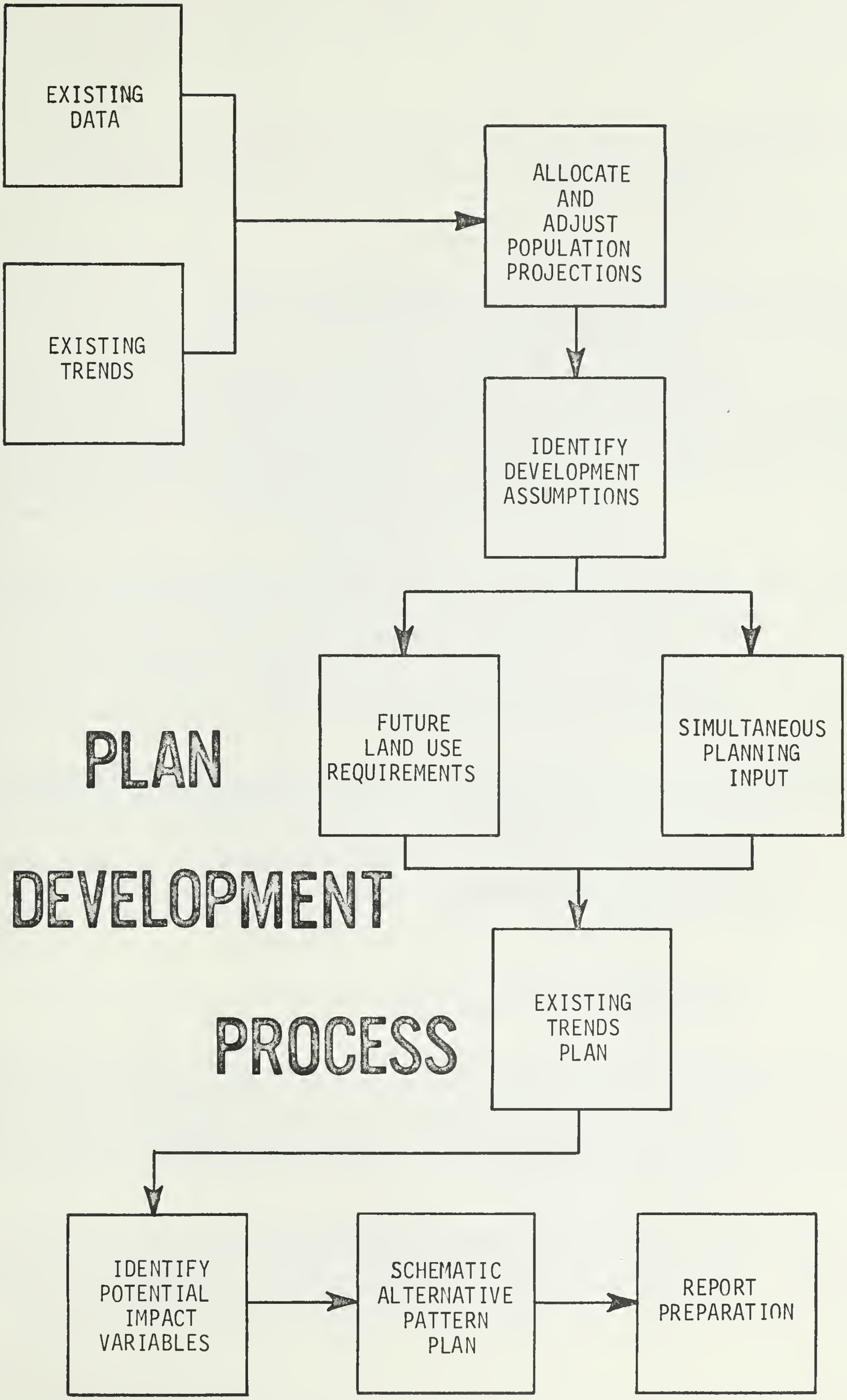
SCOPE OF THE STUDY

The scope of this project includes the development of a recommended land use plan based on identifiable existing trends and a conceptual alternative plan based on an analysis of alternative conditions which could result if all proposed and potential development projects are implemented. The future land use requirements depicted in the recommended existing trends land use plan are computed on the basis of employment and population projections which are in turn based on adjusted projections made initially by the State of Illinois, Office of Planning and Analysis. The plan also considers major development projects within the area which are either currently under way or well defined and in process. The analysis of alternative conditions resulted in the development of a schematic alternative growth pattern plan which reflects impacts (population, employment and resultant land use increases or shifts) which could occur if potential major development projects identified in the study actually happen.

METHOD OF APPROACH

The eight-step general methodology which was followed during this study is shown in the attached diagram. The initial step consisted of two parts. The first part was an analysis of existing physical and development data utilizing a series of map overlays. The data analyzed included the following:

- Existing land use information



PLAN DEVELOPMENT PROCESS

EXISTING DATA
EXISTING TRENDS
ALLOCATE AND ADJUST POPULATION PROJECTIONS
IDENTIFY DEVELOPMENT ASSUMPTIONS
FUTURE LAND USE REQUIREMENTS
SIMULTANEOUS PLANNING INPUT
EXISTING TRENDS PLAN
IDENTIFY POTENTIAL IMPACT VARIABLES
SCHEMATIC ALTERNATIVE PATTERN PLAN
REPORT PREPARATION

- Future development projected by existing county and community plans
- Water and sewer development proposals
- Park and recreation development proposals
- Areas of steep slope
- Floodable areas and severe soil conditions

Development proposals made by the following agencies were also considered:

- Illinois Department of Transportation
- Illinois Department of Conservation
- United States Army Corps of Engineers
- East-West Gateway Coordinating Council
- Southwestern Illinois Metropolitan and Regional Planning Commission

The second part was the analysis of existing trends in socio-economic data as indicated by information generated by various organizations such as:

- United States Bureau of the Census
- Illinois State Employment Service
- Illinois Office of Planning and Analysis
- Southwestern Illinois Metropolitan and Regional Planning Commission

In the third step, the development assumptions upon which the resulting plans were to be based were identified. The fourth step was the analysis of the input available from simultaneous, on-going planning projects and the calculation of future land use requirements. This calculation was based on the preceding analyses and assumptions. The fifth step resulted in the development of the existing trends plan.

The identification of potential impact variables which could alter the existing trends and therefore the existing trends land use configuration was the sixth step. The seventh was the development of the schematic alternative growth pattern plan which protrays in a conceptual manner the potential impact of the variables identified earlier in the process. Preparation of this report was the eighth and final step.

LIMITATIONS OF THE STUDY

Work undertaken within the scope of this study does not fully analyze and evaluate all of the possible effects on land use and population distribution which could be created by the development variables identified. The existing trends plan does not, and should not, consider a number of major proposed and potential development projects such as a new metropolitan airport, full development of the Kaskaskia canalization project, railroad relocation, or major redevelopment of core areas. These proposals will have a significant impact on the region's future employment, population, and land use configurations, and should be documented and incorporated as they occur or come closer to implementation and constructional/operational reality.

An attempt to address these impacts, however, in an overall and initial manner was made in the creation of the schematic alternative growth pattern plan. This second plan and development alternative addresses these impacts only in broad and generalized terms. The specific impacts of such potential developments as those mentioned above will have to be quantified and analyzed as part of the continuing planning process when they come closer to existence. They will then be incorporated into updated versions of the existing trends plan.

The study also does not reevaluate all of the previously established background data such as physical characteristics of the land and selected socio-economic trends. As in the case of physical development variables, it is also recognized that the socio-economic characteristics of the area are dynamic and therefore must be analyzed periodically. These evaluations and analyses of data should also be done as part of the continuing planning process.

II. PHYSICAL BASIS FOR PLANNING

Topography, soils and other physical factors are important considerations in the development of a land use plan. The physical character of a region will greatly affect that region's potential to accommodate new growth and development. Physical characteristics will affect the intensity of need and the ease of providing public utilities and other urban services. Physical factors will also largely determine the desirability of a particular area for development. If an area has severe physical limitations, development should usually either be located on alternate sites or be required to satisfy special precautions or requirements necessary to develop that area. With either alternative, there must be an awareness of the area's physical limitations if future construction, operation, and maintenance problems are to be avoided.

This chapter summarizes the findings of previous studies concerning the Metro-East physical environment and provides a physical basis for the allocation of future projected population and land use. The discussion focuses upon descriptions of the geologic history and general physical characteristics of the three-county Metro-East region. It then discusses the region's physical potential for future urban development based on previously measured and evaluated land suitability and demand.

GEOLOGIC HISTORY

The physical character of Madison, St. Clair and Monroe Counties was greatly affected by two major events--the inundation of ancient seas and the invasion of continental glaciers. The seas deposited vast amounts of sediment and were responsible for the formation of various bedrock systems; whereas the continental glaciers, which later covered the land, deposited additional materials and formed many of the area's existing surface features.

Bedrock Geology

Numerous inundations by ancient seas into the North American continent occurred during the Paleozoic Era which began approximately 600 million years ago and lasted about 375 million years. During each of these inundations, tons of debris were deposited. As layer after layer accumulated, this debris became compacted and formed sedimentary rock. Prevalent bedrock within the study area consists of sedimentary rock from three geologic periods of the Paleozoic Era--Ordovician, Mississippian and Pennsylvanian.

Ordovician bedrock, which is the oldest of the three systems, consists mainly of dolomite, sandstone and shale. It is prevalent in the southwest part of the study area, principally beneath the Mississippi River flood plain. The Ordovician system dips sharply in an easterly direction toward a geologic depression known as the Illinois Basin and is found only at much greater depths in remaining portions of the study area.

Bedrock of the Mississippian age is the second oldest of the region's three major geologic systems, and is prevalent throughout most of the western portion of the three-county area. The Mississippian system is composed primarily of limestone, sandstone, and shale formations. This strata dips eastward toward the Illinois Basin and is overlain by Pennsylvanian strata in the eastern part of the region.

Pennsylvanian bedrock, which is found directly below the glacial drift in the eastern part of the study area, consists mainly of shales, sandstone, thin limestone, claystone and coal. Extensive coal-bearing seams in this area lend themselves to both strip and underground mining operations. Coal mining operations have been underway throughout much of the eastern portions of the study area for many years, and are expected to continue and possibly expand due to the vast amount of available reserves, the recent fuel shortage, and proposals for development of coal gasification/liquefaction industries.

Glacial Deposits

The movement of glaciers southward from the Arctic Circle and across North America occurred in the Pleistocene Epoch. This era, generally referred to as the Ice Age, began approximately one million years ago and lasted until about 10,000 years ago. During this period, at least four major glacial advances covered portions of Illinois; however, glacial materials in the study area represent deposits left by only the last two advances--the Illinoian and the Wisconsinan.1/

Materials deposited by these glaciers are known collectively as drift and may occur in either heterogeneous mass or be more or less well sorted depending on the manner of deposition.2/ Illinoian Drift consists primarily of materials deposited in place as the margin of the glacier began to melt. This type of glacial drift is referred to as till, and is composed of a mixture of silt, clay, sand and rock fragments of various sizes with little or no stratification.3/ Till may occur as ridges known as end or recessional moraines, which mark places where the ice front temporarily held a

---

1/Kemal Piskin and Robert E. Bergstrom, Glacial Drift in Illinois: Thickness and Character, Circular 416 (Urbana, Illinois: State Geological Survey, 1967), pp. 2-5.

2/Joint Editorial Board Representing American Public Health Association, American Society of Civil Engineers, American Water Works Association and Water Pollution Control Federation, Water and Wastewater Control Engineering Glossary, 1969, p. 148.

3/Ibid, p. 346.

fixed position, or as gently rolling plains called ground moraines or till plains.[4/] The Illinois Till Plain covers much of the northern and eastern portion of the three-county study area.

The Wisconsinan ice sheet did not advance into the study area, but its effects are widespread in the form of wind- and water-transported glacial materials. Material deposited by streams originating from the melting Wisconsinan glacier is called glacial outwash. It is composed of sand, gravel, silt and clay, with the heavier materials (sand and gravel) being deposited near the ice front, and the finer particles (sand, silt and clay) being carried farther and spread over greater distances.[5/] Outwash is found primarily beneath the recent alluvial deposits of the American Bottoms and in other major stream valleys of the study area. The fine-grained sand, silt and clay (mostly silt) sediments were picked up by the wind and deposited on the uplands in uniform layers known as loess. Deposits of loess are present in the bluff area, paralleling the American Bottoms and, although not as thick, extend northward and eastward from the bluff area throughout most of the region.

PHYSICAL DESCRIPTION

The present-day topography of the three-county Metro-East region is rather diverse, consisting of nearly level flood plains and gently rolling till plains separated by a somewhat rugged bluff area (see Plate 2). Drainage is generally north to south and is provided by two large rivers (the Mississippi and Kaskaskia) and their numerous tributaries. Slopes generally range from 0 to 5 percent throughout most of the flood plains and till plain sections of the region to well over 15 percent in the bluff area and areas adjacent to many of the smaller streams (see Plate 2).

Plate 3 has been developed to provide a general guide for determining the basic physical limitations associated with urban land use development and construction in the three-county area. The map is based on the degree of soil limitations created by a wide range of physical properties, including susceptibility to seasonally high water tables, flooding or ponding hazard, land slippage, differential settling of moved material, and topography. Soil properties that are relatively free of limitations are rated as "slight." Soils referred to as "marginal" or "moderate" have limitations that need to be recognized, but which can be overcome through sound land management and careful design, construction, and maintenance. A "severe" rating indicates the physical limitations are restrictive enough to generally make urbanized land use development questionable. A severe rating does not necessarily mean the soil cannot be used for a specific purpose, but does indicate that

---

[4/] Piskin and Bergstrom, op.cit., p. 4.
[5/] Ibid., p. 5

careful planning and design as well as very good and consistent management are essential. In some cases, the correction of these physical limitations as identified may not be economically feasible. The map is intended to be generally reliable for predicting the developmental suitability of large areas, but is not sufficient in exacting detail for predicting the suitability of an individual or small specific site. Therefore, for specific sites, on-site evaluations and more detailed engineering studies or analyses are needed.

Flood Plains

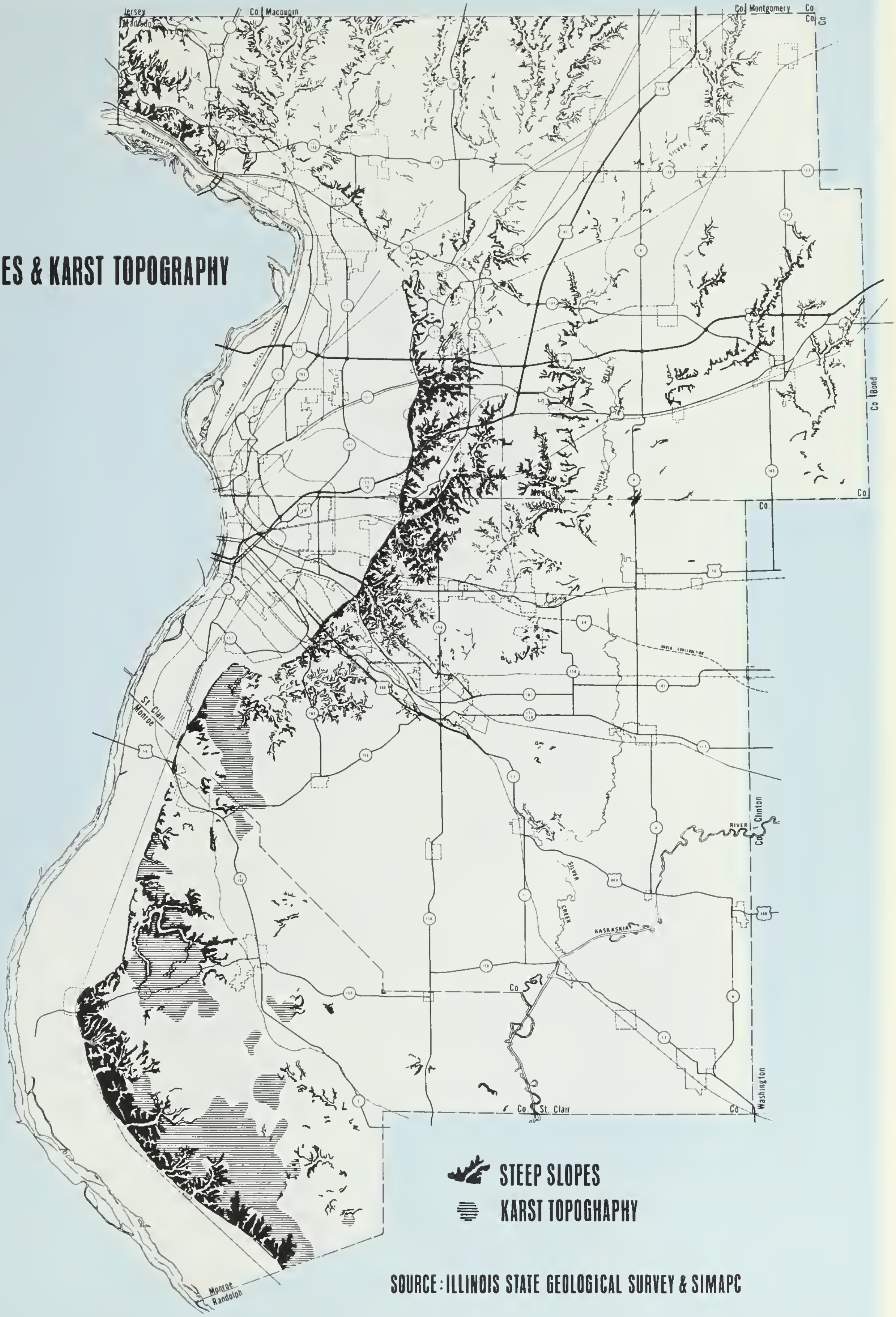
The nearly level flood plains, flood-prone areas, areas subject to internal ponding, and other lowlands throughout the three-county region have a variety of land forms and pose special problems for urban land use development. Flood plain topography varies with the size and age of the streams, but many topographic features are similar and vary only in size. Oxbow lakes (e.g., Horseshoe Lake), meander scars, sand bars and terraces, and backwater swamps are all typical features of the region's topography immediately adjacent to the Mississippi. Due to the steep gradient of streams flowing from the adjacent uplands onto the flat, level flood plain of the Mississippi (American Bottoms), areas adjacent to the bluffs are characterized by alluvial fans and are threatened by internal flooding. In addition, the presence of high water tables and a predominance of soils poorly suited for urban uses in many areas amplify the problems associated with flood plain development (see Plate 3).

However, it should be noted that certain portions of flood plains, when protected by levees, are less restrictive and can be advantageously developed when proper precautions are taken. The decision to develop a flood plain site should be dependent upon the severity of localized physical constraints, the developer's willingness to exercise proper precautions, and the intensity of demand for that particular site. It is the intensity of demand which gave impetus to the development of the many Metro-East communities located within the American Bottoms. Unfortunately, in many instances, localized constraints were too severe and/or proper precautions were not taken. The result has been poor septic tank operation and, in some cases, severe structural damage such as in the Dobrey Slough area.

Because of development hazards, flood plain development should be restricted. Due to locational advantages, however, developmental pressures will continue and some additional flood plain development will undoubtedly occur. Therefore, efforts should be made to insure that proper engineering, design, and control techniques be employed to develop these areas to their greatest potential from an environmental as well as an economic standpoint.

plate 2

SEVERE SLOPES & KARST TOPOGRAPHY



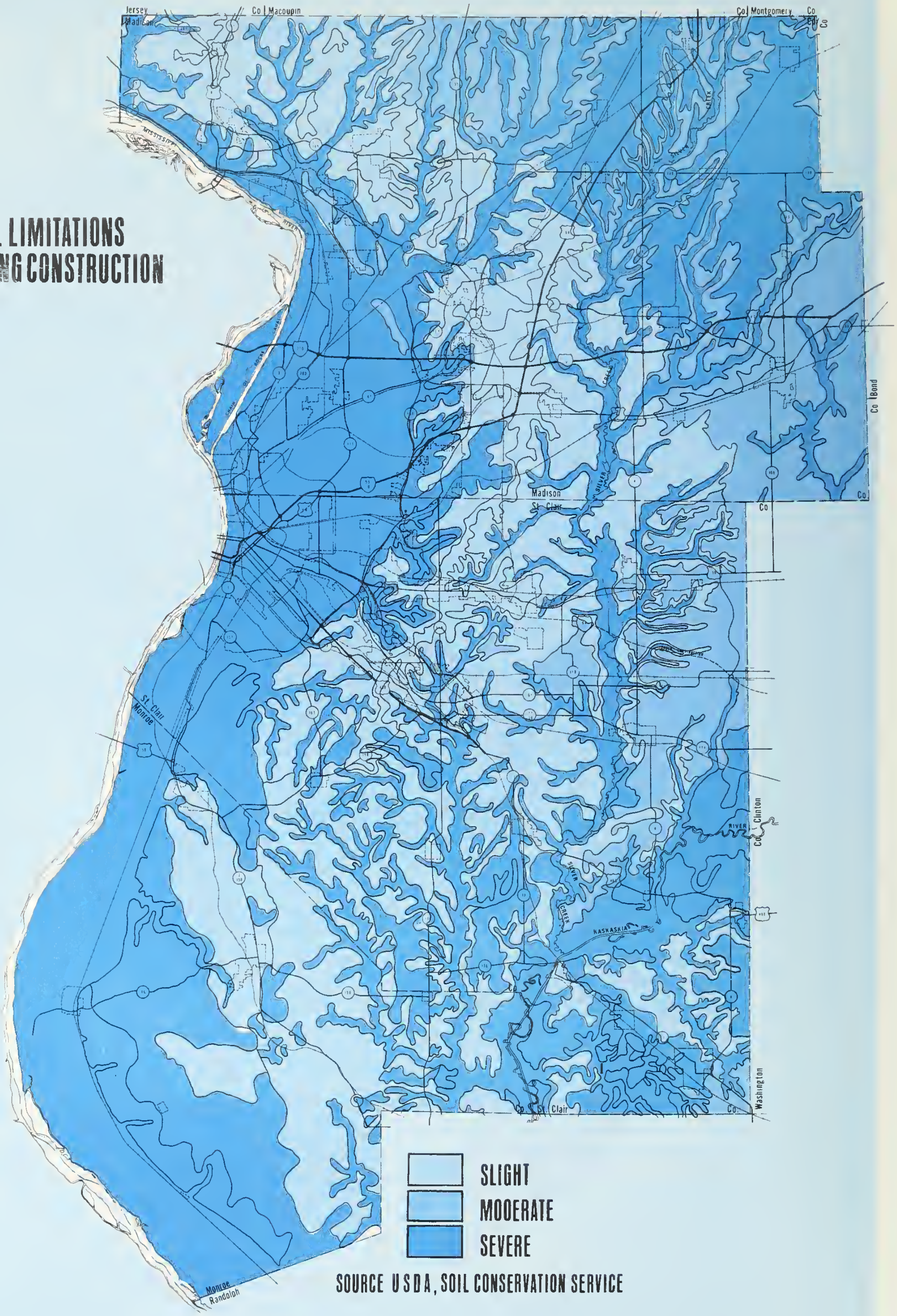
▆ STEEP SLOPES

▤ KARST TOPOGHAPHY

SOURCE: ILLINOIS STATE GEOLOGICAL SURVEY & SIMAPC

plate 3

SOIL LIMITATIONS AFFECTING CONSTRUCTION



SOURCE U S D A, SOIL CONSERVATION SERVICE

Upland Plains

The upland plains which occupy the eastern and central portion of the study area are characterized by nearly level to gently rolling terrain interrupted by scattered ridges. Major streams of the area include the Kaskaskia River, Cahokia Creek, Richland Creek, and Silver Creek. Glacial drift exceeds 50 feet throughout most of the upland plains except in southeastern St. Clair and most of Monroe County where glacial deposition was largely controlled by resistive limestone bedrock. Here, bedrock is usually near the surface and outcrops in many locations, particularly to the west near the bluff line. Southeastern St. Clair County and Monroe County are also characterized by large areas of karst topography which necessitates the provision of adequate sewage disposal to prevent groundwater pollution in these areas. Soil conditions vary widely throughout the upland plains, but generally pose less severe limitations than do bottomland soils, except along stream beds and scattered depression areas where steep slope and drainage problems prevail (see Plate 3).

Bluff Area

The bluff area provides a demarcation line between the American Bottoms to the west and the upland plains to the east. This area, up to approximately one mile wide, is composed of steep limestone outcrops and thick loess bluffs rising to 150 to 200 feet above the flood plain. Loess deposits vary in thickness from over 30 feet to more than 100 feet. Many streams have eroded into the bluff area creating deep ravines and a rather rough topographical condition.

The bluff area has become a rather popular zone for residential development, partially because of the scenic vistas offered throughout much of this area, and also because of the general absence of the physical problems previously identified as associated with the American Bottoms. The bluff area itself, however, is not free of development hazards. Although the loess subsoil is normally quite stable, it is extremely erodable when exposed to moisture as may occur during excavation for construction sites and through the use of individual septic systems. Therefore, caution should be exercised during construction and in the spacing of structures where central sewer systems are not provided. The presence of steep slopes tends to amplify the potential development hazards of this area. In addition to the problem of potential subsurface erosion, much of the bluff area is undermined as a result of past coal mining operations (as is much of the upland plains area). However, undermining does not usually pose a severe developmental constraint except where large and heavy structures are involved. In such instances, the potential for subsidence should be investigated prior to construction. As in the upland plains, soil limitations vary widely throughout the bluff area, but are predominantly moderate (see Plate 3).

LAND POTENTIAL FOR URBAN DEVELOPMENT

Urban land development potential is an essential consideration in land use planning. It indicates those areas within the region which are most desirable and likely for development, not just in terms of current demand, but also as an indication of capability to accommodate existing and projected demand. An understanding of a region's land development potential for urban use absorption, therefore, provides a basic guide for the recommended allocation of future land usage to serve the projected population.

Land development potential is determined primarily through the identification, measurement and analysis of physical suitability and demand. Since existing soil, topographic and geologic conditions have a direct influence on the cost and quality of development, physical suitability is a major determinant of an area'a potential for urban development. However, no matter how well physically suited for development an area may be, urban development will not occur without demand. Conversely, a great development demand may be offset by excessively high development costs or harmful environmental effects resulting from severe physical limitations. Therefore, physical suitability and demand play balanced roles in determining land development potential.

In assessing the land development potential of the three-county Metro-East region, a uniform pattern of one square mile grid cells was employed as the geographic measurement and evaluation base. Tne development potential of each such cell was then measured and rated based on physical suitability and demand as determined by proximity to existing urban services and the accessibility to regional employment centers. The results of this land potential study are presented graphically in Plate 4.6/

Areas having the greatest potential for urban development are generally found in the bluff area (see Plate 4). As noted previously, the bluff area has become a rather popular zone for residential development largely because of its physical character. In addition, much of the bluff area is also within proximity to the urban, social, and cultural services offered by the existing urban centers of Alton-Wood River, Edwardsville-Collinsville-Troy, Belleville-O'Fallon-Fairview Heights and, to a lesser degree, Columbia-Waterloo. Moreover, the bluff area is well served by a network of interstate highways and major arterials connecting it to the metropolitan employment centers of St. Louis City and County, East St. Louis, Granite City and Alton-Wood River.

Areas of moderate development potential are found generally at the base of the bluff area, adjacent to existing urban centers of the American Bottoms

---

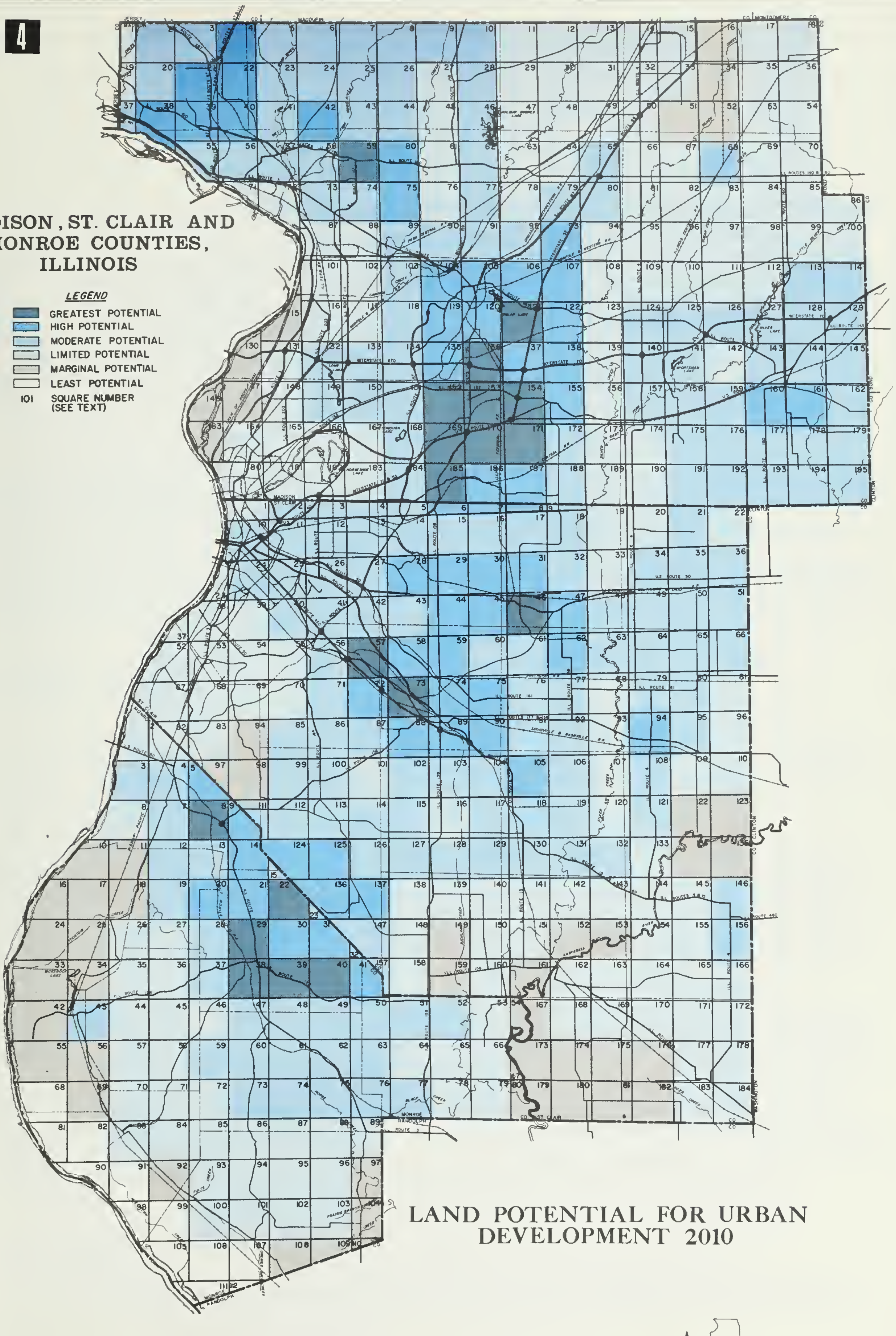
6/ Southwestern Illinois Metropolitan Area Planning Commission, An Evaluation of the Potential of Land for Urban Development in Madison, St. Clair and Monroe Counties (Collinsville, Illinois, 1971).

plate 4

MADISON, ST. CLAIR AND MONROE COUNTIES, ILLINOIS

LEGEND

- ■ GREATEST POTENTIAL
- ■ HIGH POTENTIAL
- ■ MODERATE POTENTIAL
- ☐ LIMITED POTENTIAL
- ▨ MARGINAL POTENTIAL
- ☐ LEAST POTENTIAL
- 101 SQUARE NUMBER (SEE TEXT)



LAND POTENTIAL FOR URBAN DEVELOPMENT 2010

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT UNDER A CONTRACT WITH THE ILLINOIS DEPARTMENT OF LOCAL GOVERNMENT AFFAIRS.

such as East St. Louis and Granite City, and around outlying smaller communities (see Plate 4). These areas are expected to experience less intensive growth and development than those within the highest potential, primarily due to either a predominance of physical constraints or because of lesser accessibility to existing urban services, facilities or employment centers. Most of the remaining portions of the three-county area (generally rural at present) are expected to receive only limited new urban development due to a combination of physical constraints and travel time distances from existing urban and employment centers.

III. ECONOMY

An understanding of the regional and local economic structure is fundamental to land use planning. In large measure, the destiny of a region is determined by the nature and extent of its basic productive activities. Examination of the economy indicates the ways and reasons through which the region has developed, its existing economic conditions, and the nature and extent of its future prospects. Stated another way, regions endure and develop in direct response to the production capabilities and subsequent distribution of goods and services, both of which create jobs and consequently attract people.

Viewed in this context, economic conditions can significantly affect land development and development potential. An expanding economy with growth of new industries and businesses will inevitably result in development demand for additional urban land uses and facilities. Conversely, the economic forces of the region may be responsible for leveling off or declining trends in economic activity which in turn exert different influences on the pattern and extent of land development in the region.

HISTORICAL OVERVIEW

The overview of historical economic development within the three-county area is of interest not only from an academic viewpoint, but also from the standpoint of helping to answer some of the questions concerning the nature of the present-day economy.

It is important to note that the region initially grew as a trade and transportation focus rather than either an industrial or agricultural production center. The shifts from water to rail transportation around 1860 had significant ramifications on the Metro-East economy, just as transportation modes today are placing a substantive impact on the nature and extent of the area's economic activities and potential.

Another important historical reference is the fact that the pattern of heavy industry in Madison and St. Clair Counties developed principally in the 1890-1919 period, and persists today as the major basis of the industrial structure of the area. The expansion of the industrial economy sectors of the East Side has not fully borne out the promise which was suggested by the dramatic genesis at the turn of the century. Few new large employers have established operations in the area since that time, although many existing industries have, in fact, expanded.

Early Economy

The first semblances of an aboriginal culture are believed to have started in the three-county area around 8000 B.C. Although initially hunters and gatherers, Indian societies gradually evolved into a rather sophisticated socio-economic culture with many of the same fundamental economic functions as exist today. Their basically subsistence agrarian economy was supplemented by trade with other Indian tribes, and later with the European explorers who entered the region in the 1600's. French explorers and missionaries established villages in the American Bottoms area for the purpose of trade, and soon after, military outposts and a provincial government were established and eventually became the focus of the French-Indian War.

The surrender of the territory by the French to the British, and subsequently from the British to the Americans, coupled with the Louisiana Purchase in 1803, triggered the flow of American immigrants into the area in the late 1700's and early 1800's. Although St. Louis, set up as a trading post in 1764 by Pierre Laclede Linquest, captured most of the trade in the area, several settlements on the uplands beyond the bluffs in Illinois developed into localized trade centers for agricultural products. A number of the larger settlements, among them, Alton, Belleville and Edwardsville, had local market-oriented manufacturing industries for the production of durable goods such as wagons and farm implements, and others for the processing of agricultural products. Import/export-oriented trade, other than that of a strictly local nature, was confined to areas readily accessible to the river transportation.

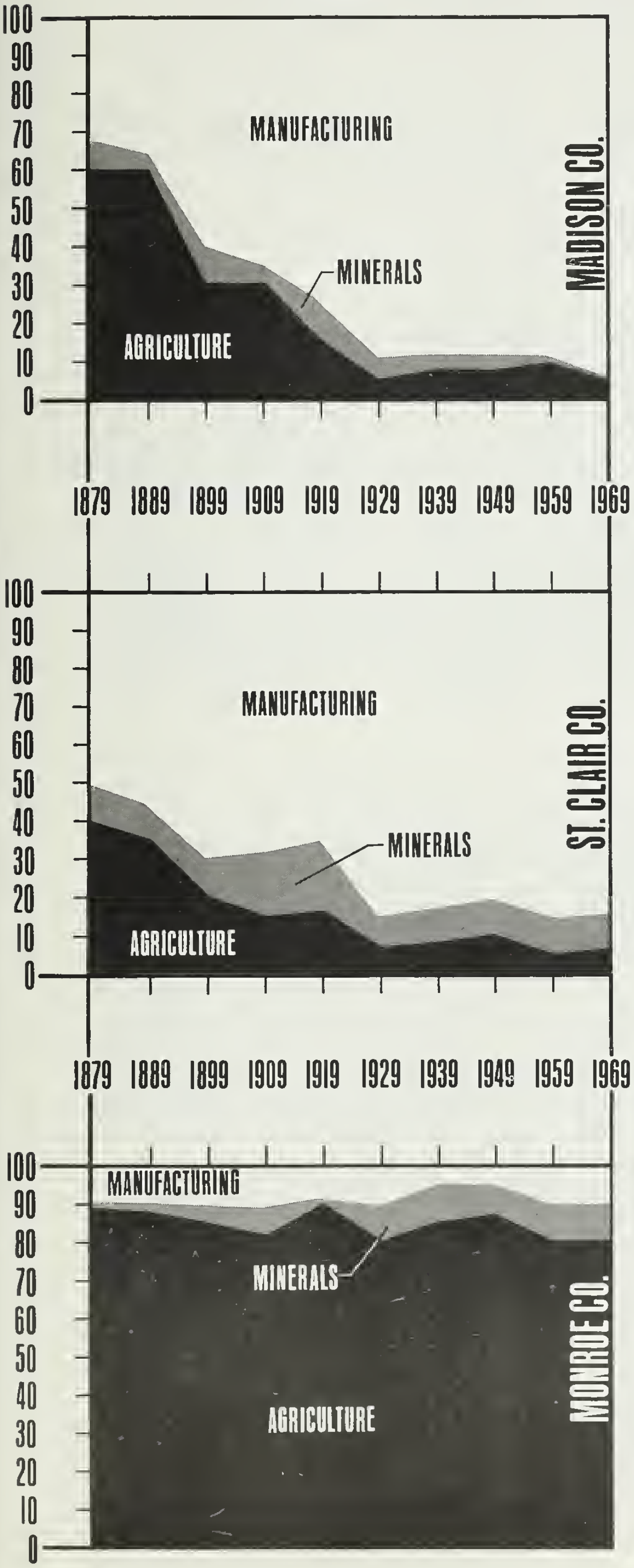
Early Industrial-Economic Expansion

The first period of modern industrial expansion in the Mid-Mississippi Valley occurred between 1850 and 1874. The era was heralded by the extension of railroads into the area during the 1850's, and was further stimulated by the extensive service and goods demands of the Union forces operation in the Mississippi Valley during the Civil War. During this period, metal-working industries expanded and the establishment of the National City Stockyards gave rise to the first major industry established in the American Bottoms area. Without rail service across the Mississippi River, East St. Louis became the commercial depot for St. Louis traders. After an intensive legislative fight, which pitted Alton against St. Louis over the location of the first Mississippi River bridge, Eads Bridge was built by private entrepreneurs at East St. Louis in 1874. Subsequent construction of levees and draining of swamps in the American Bottoms made available a considerable amount of relatively inexpensive land with excellent accessibility to river and rail transportation facilities.

The period from 1875 to 1890 saw the overall St. Louis metropolitan area rise as a major national industrial center. Although most of such economic development took place in the City of St. Louis, Madison and St. Clair Counties reflected similar development trends. The leading manufacturing industries in St. Louis in 1880, for example, produced flour, meat products, foundry items, tobacco and beverages; these were the same products produced by leading industries on the East Side. In contrast to the relatively concentrated nature of

plate 5

PERCENTAGE DISTRIBUTION of TOTAL PRODUCT
MADISON, ST.CLAIR and MONROE COUNTIES
1879-1969



industrial development in St. Louis, however, manufacturing locations on the East Side were more scattered, with industries gravitating toward the three largest communities of Alton Belleville, and East St. Louis. Monroe County during this period continued as a predominately agricultural area, serving local and St. Louis markets.

The period between 1890 and 1919 has been called the "Golden Era" of industrial growth of the Metro-East area. Madison and St. Clair Counties showed a rate of growth during this era that has not occurred since. This "Golden Era" of growth coincided with similar national development trends which were precipitated by creation of major corporations and adoption of new technical methods. This resulted in the establishment of the existing major industries of steel, petroleum, and chemicals.

Comparative industrial growth trends during the 1890-1919 period emphasize the extraordinary industrial vitality which existed during the three decades. While employment increased 30.5 percent in St. Louis, Madison and St. Clair Counties registered a 122.4 percent increase. The proportion of total value of manufacturing product accounted for by big plants on the Illinois side of the metropolitan area increased from 20.2 percent in 1890 to 33.6 percent in 1919. Thus, although industrial activity continued to remain predominantly concentrated in St. Louis, the East Side acquired a greater representative share of the growth.

The base of the overall three-county economy has changed considerably over time. Major changes have occurred in St. Clair and Madison Counties, while activities in Monroe County have reflected a relatively minimal change to date in the percentage distribution of major sources of economic production. Plate 5 illustrates the nature of the changes that have occurred in each of the representative counties between 1879 and 1969. Both the Madison and St. Clair Counties economies have become predominantly based on manufacturing, with agriculture having declined to only 5 percent of the total product, and mining being substantially represented only in the latter county. As was mentioned above, Monroe County has changed little in terms of its comprehensive economic base (agriculture) since 1879.

PRESENT AND PROJECTED ECONOMY

The nature of the existing economy of an area should be analyzed in terms of both the economic characteristics of the population and the industrial structure of the economy.[1/] The present economy of the tri-county area is thus considered initially as an economy of people, i.e., the socio-economic characteristics of the population. Secondly, the analysis examines the structure of the present system which provides the employment and income to the population, referred to here as the economic system, though perhaps more accurately as the industrial system. The major indicator used in each of the study elements is employment, as it is that factor which not only suggests how the population is faring economically, but also indicates the trends and relative significance of each of the major income-providing activities within the area.

Socio-Economic Characteristics

The region's most valuable resource are the 554,939 people who presently reside in Madison, Monroe and St. Clair Counties. Consequently, it is important that the socio-economic characteristics of the population be examined as fundamental elements in evaluating the area's needs and potentials in the planning and development process.

Population - As documented in detail within Chapter IV of this report, the rate of increase in the population in the three-county area between 1950 and 1970 was 38.4 percent or about 1.9 percent per year. Projections reveal an anticipated growth rate of 1.4 percent annually or 43 percent between 1970 and the year 2000. The net result of this growth will be a three-county population of 788,730 at the end of this millennium.

[1/] Throughout this discussion, the term "industry" is used in its broadest context to denote all types of economic activity, not restricted solely to manufacturing or manufacturing-related concerns.

The greatest absolute growth is expected to occur within Madison and St. Clair Counties while Monroe County is expected to double its present population though contributing only 10.5 percent to the overall increase.

Labor Force and Employment - The labor force of the three-county area increased from 164,270 in 1950 to 214,433 in 1970, an increase of 28.4 percent or 1.4 percent annually (also see Appendix A). During this period, the civilian labor force participation ratio decreased from 38.6 percent to 37.5 percent illustrating the effect of the postwar baby boom. While the total population increased, the portion of the total population in the labor force decreased. During the decade 1950-1960, the determined dependents--those persons who, principally because of age factors, are necessarily dependent upon others--increased 55.2 percent as compared to an overall population increase of 25.3 percent. During the 1960-1970 decade the ratio changed considerably from 36.4 to 37.5 percent as increased numbers of people entered the labor force. Recently, the increased absorption of females into the labor force has further increased the region's participation ratio.

In comparison to the Missouri labor market area, the Illinois labor force reflects a relatively low participation ratio, in part caused by the nature of the jobs available in the Illinois portion of the SMSA. With a high concentration of heavy industries and a currently limited service base, females are not readily assimilated into the labor force.

The labor force in the three-county area is expected to increase approximately 37.8 percent or 1.3 percent annually between 1970 and 2000. This increase of 91,688 persons in the labor force is predicted on the expectation that the labor force participation ratio will rise to 39.5 percent by the year 2000. The impact of both the increasing ratio and population is the creation of a future demand for an additional 91,688 jobs by the year 2000. The ability of the local economy to support this increase is directly dependent upon the ability of area industries to share in the economic development potential of the region and the nation. A second influence, with which both the public and private sectors will have to cope, is the provision of adequate manpower training to ensure a productive labor force from which to draw.

Labor force employment in the three-county area has been traditionally associated with basic manufacturing industries. Notably, in 1950 approximately 37.0 percent of total employment was provided by manufacturing industries. However, this situation changed significantly by 1970 at which time manufacturing industries accounted for only 29.3 percent of all employment. Concurrently, employment in service-oriented industries increased significantly. Generally, this trend is expected to continue with increasing employment in service-oriented industries.

In the forthcoming three decades, employment in the three-county area is anticipated to reach 294,413, an increase of 98,295 or 50.1 percent over the 1970 level. Of this total, employment opportunities provided by Illinois industries will account for approximately 83 percent of the total anticipated labor force residing in Illinois.

The difference between total labor force employment and industry employment in the three counties establishes what may be referred to as the net commuter ratio. In 1970 the commuter ratio has risen from a 1950 level of 3.8 percent to 14.4 percent, a result of increased employee mobility. The ratio provides a relative, rather than absolute, measure of work force mobility. In 1970 for instance approximately 50,000 Illinoisans from the three-county area commuted to Missouri for employment. However, approximately 20,000 Missourians traveled to Illinois for employment. This net deficit of jobs in the three-county area is expected to increase relatively in the future. The employment projections contained herein indicate an increase of the net commuter ratio to 16.9 percent by the year 2000.

Unemployment in the three-count area generally remains higher than average levels for the nation or the state. In 1960, the rate of unemployment for the State of Illinois was 4.5 percent compared to that of the three counties at 4.8 percent. In 1970, these levels had changed to 3.9 percent and 4.3 percent respectively for the state and nation and 5.7 percent for the three-county area. This tendency for higher unemployment rates in the three-county area over those of the state and nation are anticipated to continue at least in the short-range.

Selected areas within the three-county area have, over the past decade, experienced high unemployment. In 1970, the East St. Louis urban complex attained an unemployment level of over 10 percent as represented by the U.S. Census. Further, the inability of the area's economy to participate in a general national recovery from the 1970 economic down-turn has had severe effects on existing basic employment in Madison and St. Clair Counties. In addition, during the first years of the 1970 decade, a number of large manufacturing industries ceased local operations. These plant closings, caused in part by corporate decision regarding outmoded facilities, pollution control measures, and general market conditions, undoubtedly caused many Illinois workers to seek employment in Missouri.

Income - An indication of the economic well-being of any area is found by examining the rate of income change and the comparability of those levels to regional and state levels. Income generally reflects an area's relative productive output and hence the overall state of the economy.

Two measures commonly used to gauge personal income are median family income and effective buying income. These two indicators, in conjunction with regional and state comparisons, are examined here for the three-county region.

The overall distribution of median family incomes in the three-county area shows a heavy concentration in the upper-middle income category in 1970. In each of the counties which include Madison, Monroe and St. Clair, median family income was $10,249, $9,352 and $9,547 respectively. Compared to the state and the St. Louis SMSA, the three Illinois counties had median family incomes somewhat lower. Specifically, St. Clair and Monroe Counties had median income levels substantially below those of both the state and the region. The reasons for the dissimilarities within the three counties include the high proportion of rural residents in Monroe County which have characteristically lower incomes, while in St. Clair County, the existence of East St. Louis and its serious socio-economic problems associated with inner city areas, tends to exhibit lower median family incomes. For example, in 1970, the City of East St. Louis had a median family income of $6,654 as compared with the overall St. Clair County total of $9,547.

Since 1950, trends of the state and regional level have been similarily exhibited in each of the three counties. Notably, in Madison, Monroe and St. Clair Counties, increases had been 216 percent, 250 percent, and 262 percent respectively. These compare with state and regional rates of increase of 246 percent and 254 percent respectively. Although relative increases have been highest in St. Clair and Monroe Counties, each still exhibits lower median incomes than Madison County, the State of Illinois, or the SMSA. Although income increases seem dramatically high upon initial examination, the actual rate of increase, when examined in relation to the Gross National Product Deflator, reveals a considerably lower median family income increase than that experienced elsewhere.

Education - One of the major factors which contribute to the overall potential for economic development of an area is the level of educational attainment of the adult population. Generally, the greater the level of educational attainment of the population, the more adaptable it will be to changing economic conditions, the less dependent it will be on public aid, unemployment will tend to be lower, and the potential for greater earning capacity will be higher.

The level of educational attainment in the three-county area rose significantly between 1960 and 1970. In Madison, Monroe, and St. Clair Counties, the median school years completed rose 2.4, 1.9 and 1.8 years respectively. These increases were higher than those for the state as a whole although the state did maintain a decided advantage in absolute terms. A major reason for this disparity in the tendency for rural areas to have lower levels of educational attainment than urban areas. The fact that the three-county area is in large part rural would explain the area's lower attainment levels.

In addition to the importance of the level of educational attainment of adults in the area, it is also important to examine the existing school enrollment and the types of schooling available to residents. In 1970, there were 153,439 students enrolled in elementary and high schools in the three-county area. As would be expected, the largest number, representing approximately 65 percent, were enrolled in elementary schools.

The greatest change occurring in the educational system in the 1960-1970 decade was the great increase in college enrollment. Enrollment increased 202 percent in the ten-year period, partially in response to the increased emphasis on higher education in the 1960's, the greater number of college-age youths as a product of the postwar baby boom and, lastly, the availability of college facilities following construction of the Southern Illinois University at Edwardsville.

Employment Projections and Forecasts - 1970-2000

The employment projections contained herein have been formulated using initial projections prepared by the Office of Planning and Analysis of the Illinois Bureau of the Budget for Madison, St. Clair and Monroe Counties and those prepared by the Bureau of Economic Analysis of the U.S. Department of Commerce for the St. Louis-centered economic area. These projections are a best estimate of what may be expected to occur, rather than a representation of optimal economic growth patterns. The projections presented are not to be construed as a constraint on the region's economic growth, nor do they imply a connotation as to desirability or undesirability. The base figures (1970) used were derived from the Illinois State Employment Service and in part from the U.S. Census document, County Business Patterns.

Methodology and Assumptions - The methodology utilized by OPA to project employment for Illinois counties employs a step-down ratio technique in conjunction with trend extrapolation. This projection technique assumes that certain industries are growth-generating (basic and localized export industries), while others (localized residentiary) are local service-oriented and non-growth generating. This base-service activities relationship is an accepted concept in the field of regional economics, and recognizes the fact that certain industries attract revenues to the region, and thus generate growth, while others operate and grow only in response to these basic industries. Further, the projection methodology employed assumes that the growth-generating industry trends at the analytical regional level will essentially parallel those at the local level, and thus does not attempt to account for selected unique local dissimilarities.

The following pages describe the procedures used for determining projected employment for the three-county area using the OPA-derived statistics as a principal initial input.

Projection Procedures -

(1) Industries are classified into two categories--basic and localized. Basic industries are those whose output is primarily for export out of the region, while localized industries are those whose output is devoted to intra-area sales and service. Localized industries are further subdivided into export and residentiary components.

(2) Projected employment in each of the basic industries in each county is related to projected industry employment in an analytical region as identified by the National Planning Association's National and Regional Economic Projections Series.

(3) The existing export component of the localized industry's employment is determined and subsequently projected. An estimate of the existing export component is derived by taking the difference in the localization coefficient and multiplying the difference by the existing population in the local area. Once the existing export component of the localized industry employment has been identified, it is then projected by the following three successive steps.

(a) Derive the ratio of the area's export component of the localized industry employment to the analytical region's employment in the same localized industry.

(b) The ratio is trend extrapolated to the project year.

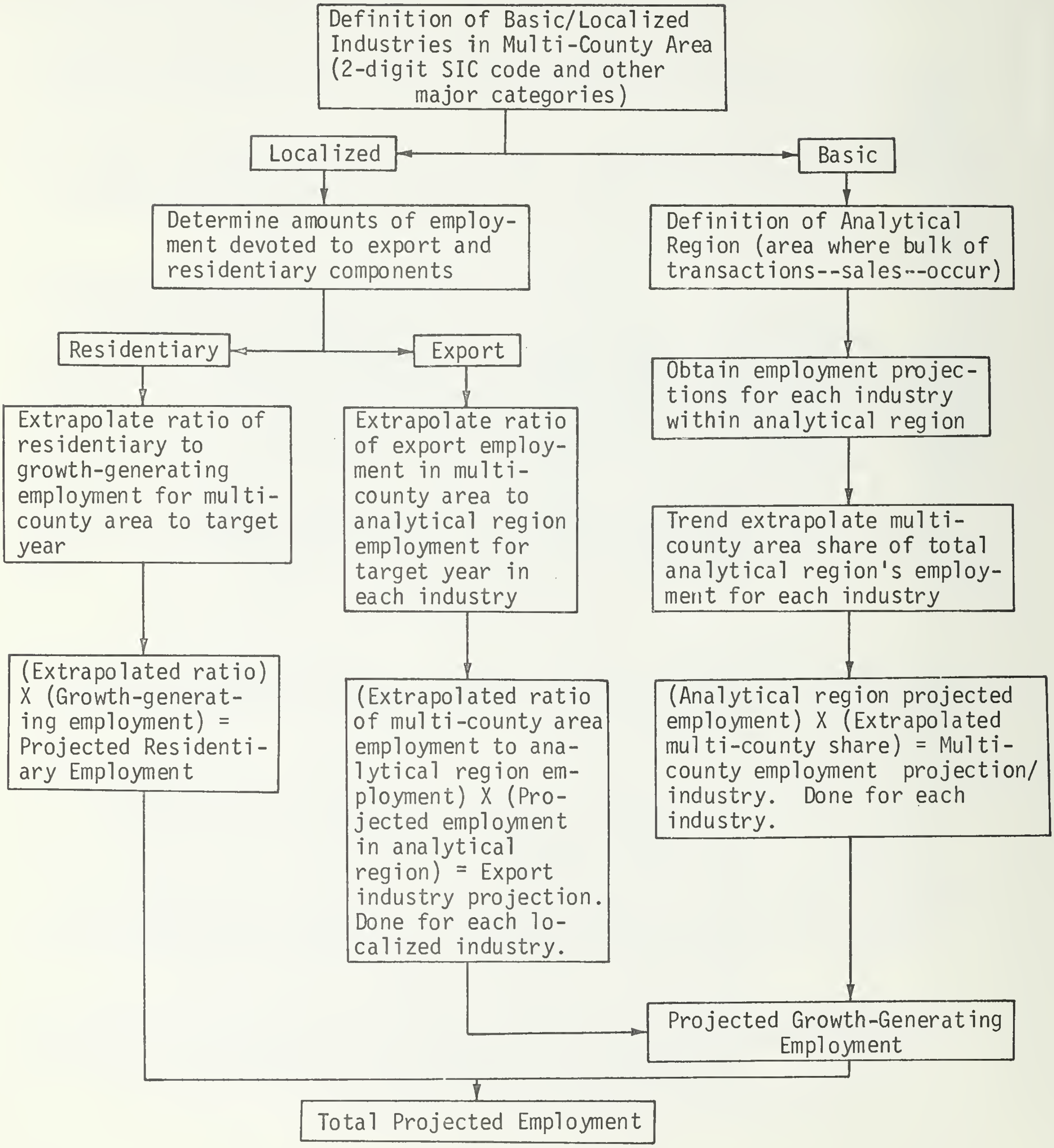
(c) Obtain the export employment component for the projection year by multiplying the projected ratio by the projected level of employment in the localized industry for the analytical region.

(d) The sum of projected employment in the basic industries and the export employment component of the localized industries represents the projected growth-generating employment in the local area.

(e) The residentiary component of a localized industry's employment is projected using employment multipliers as a function of its relationship to the total growth-generating industry employment.

(f) The sum of projected employment in all basic and localized industries constitutes total employment in the local area for the projection year.

EMPLOYMENT PROJECTION AND FORECAST METHODOLOGY


Definition of Basic/Localized Industries in Multi-County Area (2-digit SIC code and other major categories)
Localized
Basic
Determine amounts of employment devoted to export and residentiary components
Definition of Analytical Region (area where bulk of transactions--sales--occur)
Residentiary
Export
Obtain employment projections for each industry within analytical region
Extrapolate ratio of residentiary to growth-generating employment for multi-county area to target year
Extrapolate ratio of export employment in multi-county area to analytical region employment for target year in each industry
Trend extrapolate multi-county area share of total analytical region's employment for each industry
(Extrapolated ratio) X (Growth-generating employment) = Projected Residentiary Employment
(Extrapolated ratio of multi-county area employment to analytical region employment) X (Projected employment in analytical region) = Export industry projection. Done for each localized industry.
(Analytical region projected employment) X (Extrapolated multi-county share) = Multi-county employment projection/industry. Done for each industry.
Projected Growth-Generating Employment
Total Projected Employment

Industrial Classification and Data Sources - Employment projections have been prepared for industries in Madison, Monroe, and St. Clair Counties on a two-digit SIC level of aggregation. The following generalized industries are included in the projection series.

(1) Agriculture, Forestry, Fisheries
(2) Mining
(3) Construction
(4) Manufacturing
(5) Transportation, Communication, and Public Utilities
(6) Trade
(7) Finance, Insurance, and Real Estate
(8) Services
(9) Civilian Government

The historical data series on industry employment by county has been derived from the Department of Commerce publication, County Business Patterns, unpublished state data for unemployment, insurance-covered employment, and from other selected federal and state sources.

The projection series developed by OPA was reviewed and revised wherever appropriate following an examination and comparison of trends within the entire St. Louis-centered economic area as delineated by the U.S. Bureau of Economic Analysis. The inherent relationship between the three-county economy and that of the St. Louis region as a whole was established by reviewing past trends in the regional and subregional economies. Subsequently, the OPA projections were revised in a few selected cases where those cited did not conform to recent local trends and regional trends as forecasted for the St. Louis economic area by the Bureau of Economic Analysis.

The employment projections, as derived by OPA and subsequently adjusted, suggest that substantial changes in the structure and pattern of economic activity and employment can be expected to occur over the next decade. The major changes are evidenced in the trends in manufacturing, trade and civilian government. Manufacturing employment (both durable and non-durable) goods) is projected to increase by 10.5 percent from 49,115 to 54,272, while trade and civilian employment are projected to increase by 16.3 percent and 25.6 percent respectively. With other industrial employment trends considered, employment in the three-county area may be expected to increase to a total of 244,553 by 2000 from a total of 167,809 to 1970, representing an increase of approximately 76,744 jobs or 45.8 percent over that which currently exists.

The net result of such trends, if continued, could be a weakening of the existing basic economy structure of the three-county area. With an increase in the number of service jobs and production,(i.e., localized residentiary) being a function of basic jobs (i.e., localized export and manufacturing), the gross number of jobs available in the three-county area is projected to increase, but many such jobs will not serve to generate growth as strong trends in basic employment would tend to do.

As mentioned earlier, employment is projected to increase from 167,809 to 191,393, or by 14.1 percent, over the 1970 to 1980 decade. Between 1980 and 1990, it is expected that post-recession growth will have substantially passed and employment will grow at a more moderate rate, from 191,393 in 1980 to 213,316 in 1990, or 11.5 percent. Assuming a general growth rate similar to that projected for the SMSA as a whole, employment could be expected to reach 244,553 by 2000.

Selected Sector Analysis

Manufacturing Industries - The growth rate of employment in the manufacturing sector is projected to approximate 34.3 percent over the three decades from 1970 to 2000. Although this growth is less than the total employment growth rate for all industrial sectors in the three-county area, it does represent a reversal of general trends experienced during the economic recession in the late 1960's and early 1970's. The employment growth rate in manufacturing in the three-county area is considerably less than that projected for the SMSA as a whole, principally because many of the high-value added manufacturing-oriented industries are located within the Missouri portion of the St. Louis SMSA.

Most of the manufacturing employment expansion in the three-county area is expected to occur within the durable-goods industries, which have historically dominated the region's manufacturing sector, accounting for 64.4 percent of all manufacturing employment in 1970 and projected to account for 68.6 percent in the year 2000. The core of the durable goods sector is the primary metals industries located in the Granite City and Alton areas of Madison County. Other significant industrial groups which contribute to the overall strength of the durable-goods economic sector include fabricated metals, ordnance and glass manufacturers. One of the distinct anomalies of the manufacturing structure of the East Side is its current lack of fabricated metals industries which might be expected to locate close to the source of raw products; namely, the steel mills. Although proposed and current promotion and economic development activities could contribute positively to reversing such conditions, evidence is not currently at hand that this form of industrial activity will be generated in the near future.

Non-manufacturing Industries - The non-manufacturing sector is expected to play an increasingly important role in the economy of the three-county area over the forthcoming three decades. Approximately 59,960 new jobs are expected to be created in these sectors by the year 2000. The majority of these new jobs will be dependent upon growth in the economy's trade, government and service industries. Other sectors, most of which will also experience strong growth trends, will not contribute the same degree of economic opportunity as will those three.

Primary industries, which include both agriculture and mining, do not indicate particularly strong growth trends over the 1970-2000 period. The agricultural industry is becoming increasingly mechanized, with increasing concentration in cash grain production. Each of these conditions has resulted in a significant reduction in employment, as farms in the three-county area are becoming larger in land size while labor intensity is declining. In the 1959-1969 decade, the average size of farm operations increased from 161 acres to 193 acres. During the same period, the average number of farm operators in the three-county area declined from 1,889 to 1,544. Despite the employment trends, however, farms are becoming increasingly efficient economic units and consequently are able to produce greater quantities of agricultural products, per land unit area, than had been the case in the past.

Mining in the three-county area is primarily concerned with the production of coal and the extraction of gravel and stone products. Although petroleum production contributed significantly to mineral production in the past, it has decreased in the region as a whole in the past ten to fifteen years. By the year 2000, if existing trends continue, it is expected the mining operations will employ only .5 percent of area workers, increasing from 1,025 in 1970 to 1,291 in the year 2000. The prospect of the development of synthetic fuels industries in the area or in other parts of the state, however, could undoubtedly have a great impact on the coal industry in the area. In the near future, given the continued interest of the federal and state governments in attaining fuel self-sufficiency, mining may become one of the region's most significant direct and indirect economic growth sector. This prospect is discussed further in the section dealing with coal gasification and liquefaction project potentialities.

The construction industry of the three-county area is expected to expand considerably during the 1970-2000 period primarily in response to development in other industrial, commercial, and residential sectors. Employment in the construction sector is expected to show high percentage gains over the next 25 years at 39 percent, rising to a total of 7,620 in 2000.[2/] The construction boom of the mid-1960's which was in part stimulated by public financing in combination with the national economic down-turn at the turn of the decade has recently caused a decline in construction activity. The demand for new housing, stimulated by population growth, will continue to provide the construction industry with added economic opportunity. Non-residential construction will advance and reduce the prospect of high unemployment in the construction sector. Naturally, the development and construction of large

---

[2/] Refers to wage and salary workers; does not include self-employed contractors.

projects in the area such as the Alton Lock and Dam, the Columbia/Waterloo Airport, and synthetic fuels manufacturing facilities will also have a great impact on both the construction industry and material suppliers. The large project potentialities will serve to stimulate not only the three-county area construction industry, but also that of the region as a whole.

The transportation and public utilities sector is expected to show modest gains in employment, but a decrease in the percent of total employment. Employment in this sector is expected to rise to 17,455 by 2000, an increase of 3,560 or 25.6 percent over 1970 levels. Obviously, development of proposed additional transportation facilities will have a significant impact on growth in this sector. Public utilities industries will continue to expand to meet the increasing demands for community and area-wide services.

Growth trends in the trade sector in the three-county area were strong in the 1960-1970 decade. Although wholesale trade employment increased only moderately, retail trade expansion was vigorous. Since 1970, the trend has continued through the development of numerous shopping center type developments particularly in the suburban reaches of the area. Rising incomes and increased consumer demands for both durable and non-durable goods contributed to the substantial increase in new jobs in the retail industries during the period. Consumer credit buying and growth in the amount of disposable income also stimulated the growth trends.

Trade is expected to account for approximately 44,102 jobs by the year 2000, an increase of 17,272 or 64 percent over 1970 levels. Approximately 22 percent of this total will be represented by employment in the wholesale trade industry. Employment in trade, stimulated by strong consumer demand, will represent 18 percent of total employment by the year 2000.

Employment in the finance, insurance and real estate sector experienced significant gains in the 1960-1970 decade, increasing approximately 25 percent. Much of the gain in finance is attributed to the additional jobs created to meet the demand for consumer services in banking. The insurance industry in the three-county area consists primarily of agents and representatives of firms located elsewhere. Increases in this sector will be generally similar to those of the industry as a whole. Employment increases in this industry will show moderate overall absolute increase with growth trends generally corresponding to those of the population as a whole. By the year 2000, approximately 8,579 wage and salaried workers will be employed in the industry.

The growing affluence and changing consumer perferences of the population of the three-county area resulted in increased demands for personal and selected services during the 1960-1970 decade. Professional and business services experienced similarly high-growth trends. It is anticipated that employment in the service sector will increase by 49 percent by the year 2000, providing at that time 31,979 jobs or 13.1 percent of total employment. Expenditures for services are likely to parallel or exceed increases for durable and nondurable goods in the near future.

Civilian government employment will become an increasingly important sector of the three-county economy in the forthcoming years. By the year 2000, government jobs are expected to represent 19.2 percent of total employment. Of the total 46,719 jobs, local governments will accommodate the greatest part of the increase of 18,493 jobs, or 65 percent. Much of the increase will be dependent upon the federal government administration decisions in the future. Increased needs and demands by the population, in both the private and public sector, for services and facilities tend to support high rates of increases in government sector employment.

ECONOMIC OUTLOOK

Resources

The three-county area which comprises Metro-East is well endowed with natural and created resources. It is the availability of these resources which will enable the region to continue to grow and to develop and sustain a sound economic environment for the benefit of the residents. These resources are generally discussed in the following pages.

Geographic Location - As a part of the St. Louis metropolitan area, Metro-East is part of the largest centrally located urban area in the country. Kansas City is closer to the center of the country, but is considerably smaller; Chicago is a great deal larger, but its northern location makes it more remote from the center of the country. Perhaps even more important is the fact that the center of population of the Continental United States is now in, or very close to being in, Metro-East.

Certainly being located in and being a part of a metropolitan area of approximately 2.5 million people is a distinct advantage, both for buyers and sellers. Nearness of the cultural, medical, governmental, educational, recreational, and entertainment facilities of the metropolitan area is likewise desirable. Certainly, the employment pools of both high quantity and quality located in St. Louis and St. Louis County are important to Metro-East. In 1970, 50,000 Metro-East workers were employed in St. Louis and St. Louis County. This is about 29 percent of the entire Metro-East labor force.

Transportation - Due in large part to its location, the St. Louis metropolitan area has become a leading transportation center. With the possible exception of the Chicago area, Metro-East enjoys the finest surface transportation services in the country. The number of trunk line railroads serving the St. Louis metropolitan area has changed several times in the last few years due to mergers, but is now figured at sixteen. Only Chicago is served by a larger rail network. The number of truck lines serving the St. Louis metropolitan area has also changed frequently, but the area is recognized as the second-largest trucking center in the country. For example, single-carrier service between St. Louis and Chicago is provided by forty lines. Similarly, twenty-four lines provide service between St. Louis and Cleveland, and St. Louis and Indianapolis. In addition, there are 20 freight forwarders and approximately 150 cartage companies which provide deliveries through all parts of the metropolitan area. Plate 6 illustrates the region's current advantages as a rail and trucking center, and current railroad consolidation/relocation proposals could potentially enhance such conditions.

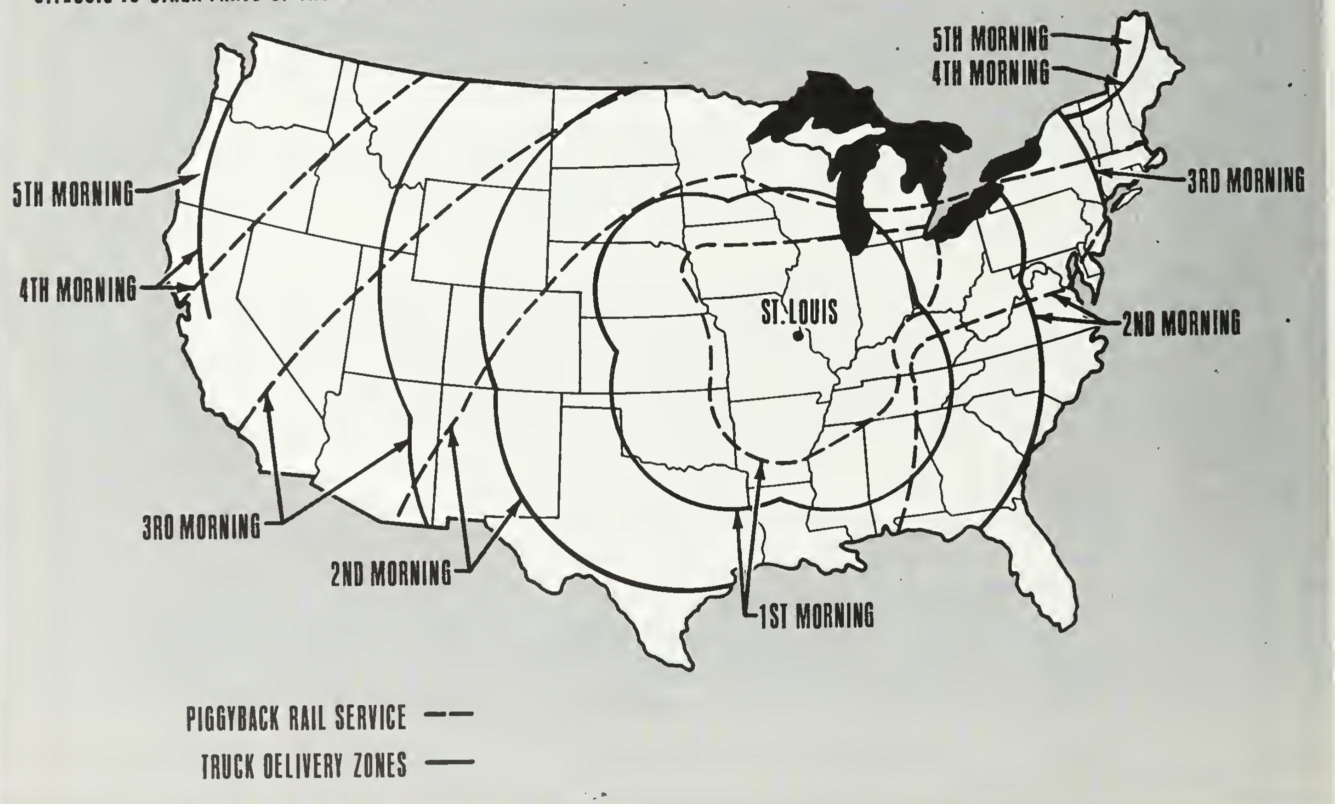
Metropolitan St. Louis is also a major inland port with three public barge terminals in the area. Two of these, operated by the Bi-State Development Agency and the Tri-City Regional Port Authority, are located at Granite City in Metro-East. There are some seventy other specialized barge terminals in the area. Furthermore, the Southwest Port District is reported to be considering construction of new barge facilities on the Mississippi in the vicinity of East Carondelet.

The U.S. Corps of Engineers records the following increase in barge traffic through the locks at Dam 26 at Alton. In 1938, the 1.4 million tons of

FREIGHT TRANSPORTATION ACCESSIBILITY

ST. LOUIS TO OTHER PARTS OF THE UNITED STATES

plate 6

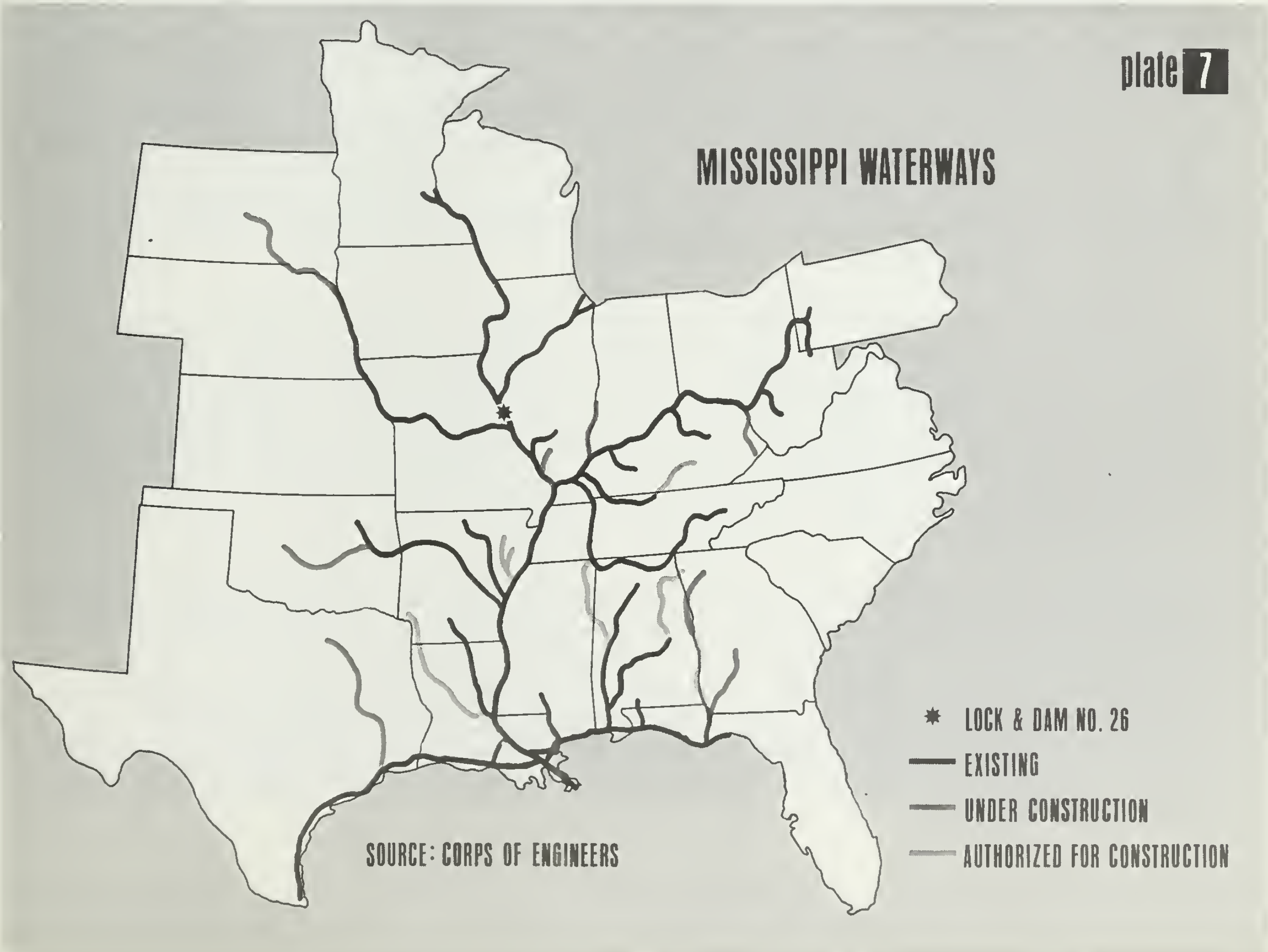


commodities movement grew almost fifteen-fold in twenty years to 20.8 million tons in 1958. Since then the tonnage has doubled again to more than 40 million tons, and by 1900 is expected to almost double again to 75 million tons. This increasing volume will necessitate the construction of the new lock and dam now proposed. Plate 7 illustrates the extent of the waterways connections to the St. Louis area. In addition, overseas connections are available through the deep-water ports of Chicago and New Orleans.

Air transportation is good, but is growing so rapidly that Lambert Field is projected to be over capacity in the 1980's. This is despite investments of approximately $100 million, which will be spent on modernization and expansion at Lambert in the next few years.

In addition to Lambert Field, there are four publicly owned airports in the St. Louis metropolitan area. Two of these, Civic Memorial, near Alton, and Bi-State Parks, in East St. Louis, are excellent general aviation facilities. There are twelve privately owned airfields in the St. Louis metropolitan area, and two of these, Lakeside at Granite City, and Highland-Winet at Highland, are in the three-county area.

plate 7



MISSISSIPPI WATERWAYS

SOURCE: CORPS OF ENGINEERS

Natural Resources - Metro-East, for the most part, has an abundance of water resources. In addition to the Mississippi, Missouri, and Meramec Rivers, there are millions of gallons of groundwater available in the American Bottoms. The eastern uplands represent the only portion of the study area where abundant groundwater supplies are not always easily accessible. However, the Kaskaskia River, which runs through southeastern St. Clair County; and Carlyle Lake, located in neighboring Clinton County, help compensate for the rather limited groundwater supplies of the eastern uplands.

Metro-East is also in the midst of the largest bituminous coal fields in the country. The Southern Illinois fields hold coal reserves of about 140 billion tons. Almost 90 percent of this resource is in seams at least 4 feet thick, and 20 percent is in seams at least 8 feet thick. In 1967, there were 65 million tons mined. At this rate, the 140 billion tons would last for more than 2150 years. The Atlas of Illinois Resources stated in 1959 that:

> In all its years of mining, Illinois has produced only 3-1/2 billion tons of coal. If only 50 percent of the known resources are recovered, there is still enough coal to last for 1400 years at the 1957 rate of production. Improvement in machines and methods will increase the percentage of recovery and extend the life of these reserves even further.

The primary use of this coal at present is for generation of electrical power and for use within the chemical industry. In the near future, however, enormous quantities may be used in the coal gasification and liquefaction process presently being proposed for development in Illinois and other states. The unique association of the coal resources and abundant water resources make Metro-East and its hinterland a prime target for the development of commercial gasification and liquefaction plants. This item is discussed further in Chapter VI.

The petroleum fields to the east are more important to their local economies than they are to the general well-being of the three-county area. Through new recovery processes, previously unproductive wells are being developed today. Of particular additional value are the billions of tons of limestone, most of which is in the river bluff quarries both up and down the Mississippi from Metro-East. Sand, gravel, clay and shale are other natural resources which are easily accessible in abundant quantity.

Land - Madison, Monroe and St. Clair Counties have a tremendous advantage in comparison with other metropolitan areas; namely, a large quantity of land available for development within minutes of the urban core. With the proper physical and environmental protection refinements, this resource element could provide good, relatively inexpensive land adjacent to the center city with available water and railway transportation services. Tracts of such potentially developable land as identified in other studies are indicated in Appendix C.

Agglomeration Economies - The economic/industrial structure of the three-county area is in, and of itself, a resource. The relative advantage of close spatial concentration of both public and private sectors of the economy contributes to overall economic efficiency. The concept of agglomeration economies in the Madison, Monroe and St. Clair Counties is particularly interesting in that within the area the basic manufacturing industries have not in the past given rise to the fabricated metals and other light manufacturing industries which might be expected to develop in response to the ready availability of raw products, a stable labor force and the services which characterize the urban area. The potentialities of such economic growth and diversification are significant, nonetheless, and future development-oriented activities are slated to focus on this economic structured aspect.

Labor - Labor, as a resource, must be considered both quantitatively and qualitatively. Initially, the availability of labor is a prime requisite of industries either seeking to expand or considering a new location. A second, though equally important, aspect of the labor supply is its quality. The quality of an area's labor resources depends upon public education, vocational training and industrial experience.

In the three-county area, the labor supply is not only sufficient to accommodate the needs of local industries but further contributes significantly to the labor needs of other parts of the St. Louis region. Thus, the area tends to be a net exporter of labor. Projections indicate that the labor force in Madison, Monroe, and St. Clair Counties will expand to 306,121 by the year 2000, an increase of 91,688 persons over the 1970 total of 214,433.

Quanitatively, the area will possess a large labor force, sufficient not only to facilitate increased industrial development in the Illinois portion of the SMSA, but also provide Missouri industries with increasing numbers of workers. In addition to the increased labor supply generated by overall increases in total population, the labor force in the three-county area is also expected to increase from within. In 1970, the labor force participation ratio was 37.5 percent which meant that 37.5 percent of the total population was actively seeking employment and, thus, in the labor force. This ratio has been traditionally lower in the Illinois portion of the St. Louis SMSA because of the concentration of heavy industries in the area and their inability to employ large segments of the female population. Because of increasing female participation in the labor force, partially precipitated by the availability of service-type jobs in the three-county area, the labor force is in effect increasing from within. The participation ratio is expected to increase to 39.5 or higher by the year 2000 contributing an additional source of labor.

The quality of the area's manpower resources is dependent upon the ability of both the public and private sector to provide the types of eductional and training programs which will most effectively serve the needs of industry expected in the future. At present, educational opportunities in the area are excellent. Southern Illinois University at Edwardsville, in addition to other smaller colleges in the area, provide well-designed curricula to meet the needs of the area's population in the realm of higher education.

Manpower training programs and vocational education programs in the area include the MDTA Skill Center at East St. Louis, and numerous vocational education programs in area high schools. Through similar efforts, the quality of manpower resources in the area can be, and is expected to be, improved between now and the year 2000.

Constraints

The disadvantages--or more accurately, the economic development constraints--of the three-county area are largely a matter of degree, point of view, and emphasis. As was discussed in the previous section, the three-county area has an abundance of natural features which lend themselves to sound economic growth and development. However, the poor environmental, labor and governmental images which have evolved in response to the heavy industrial activities, specific construction industry labor problems in previous decades, and internal fragmentation and competition, respectively, have forged the major constraints to aggressive economic development.

Public Image - Unlikely though it may seem, Metro-East is still heavily burdened by a negative public image that was created in the mid-nineteenth century when the notoriety ascribed to Illinoistown, the forerunner of East St. Louis, tended to characterize the entire Illinois portion of the St. Louis metropolitan area as "a sinkhole of iniquity." The character of the area has changed considerably since that time, although it is probable that the image will continue to deter some development in the short-term future.

Internal Fragmentation and Competition - This feature, which has tended to characterize the relationships of area communities in the past has recently begun to dissipate in response to increasing interest in, and awareness of, the need for area-wide consideration of selected problems and issues. The endorsement by area counties of the proposed economic development district program, regionalism efforts in the provision of sewer and water facilities between numerous local jurisdictions, and cooperation in efforts to develop regional transportation facilities each contribute to the diminishing interest in localized competition.

Environmental Aesthetics - The current aesthetic appeal and environmental impact of the heavy industrial complexes located in the East St. Louis-Sauget area, the Granite City area, and the Alton-Wood River area are, in part, a product of facility development early in the twentieth century. Many of the area's heavy industries, having been constructed early in this century, were not executed with the benefit of contemporary design considerations. Further, the characteristics of air pollution associated with these heavy industries tend to further diminish the existing image. Recognizing that these industries are, in fact, the basis of the area's industrial economy does not help to ameliorate the visual and physical effects of their operation. Environmental controls, however, properly and equitably implemented, can and are being employed to negate adverse effects of air pollution.

In other parts of the three-county area, the collective effects of a diverse topography, native forestation, and a "rural" character provide an attractive environment for residential and commercial development.

ECONOMIC DEVELOPMENT ACTIVITIES

The recognition of the natural and created resource base of the three-county area has encouraged the organization of groups and associates whose interests focus on the economic development potentialities of the area as a whole. In addition, localized groups such as development corporations and chambers of commerce are actively engaged in attempting to stimulate community economic growth.

Regional economic development has been encouraged under the influence of the Illinois Metro-East Industrial Development Corporation. Through its program, Agenda for Progress, and its regional support, Illinois Metro-East provides a positive element for the promotion of economic development in the area.

In 1974, the three counties of Madison, Monroe and St. Clair as well as Clinton, Bond, Randolph, and Washington Counties are expected to be designated as an Economic Development District by the Economic Development Administration of the U.S. Department of Commerce. The work program of the initial year of activity will include the establishment of a regional framework for coordinated action in the promotion of economic development.

In Madison and St. Clair Counties, as well as in Clinton and Bond Counties to the east, Overall Economic Development Programs have been implemented with active support of community and business leaders. In each case, the efforts of the OEDP Committee have succeeded in identifying project priorities and encouraging suitable economic development and employment opportunities.

Local efforts in the field of community development have generally progressed via the influence of Chambers of Commerce groups. Most communities in the area have exercised this option for community betterment.

PROJECT POTENTIALITIES

There exists within the three-county area a number of definable projects which, when implemented, will contribute significantly to the economic well-being of the area. The projects range from direct and immediate projects, such as the development of transportation facilities, to a collateral effort directed toward the formulation and implementation of an area-wide economic development program.

EDA Growth Centers

The scope of the region's economic development program includes the preparation of a regional economic development plan directed toward the identification of area potentialities and the establishment of a sound course of development action. Within the framework of the plan will be the identification of growth centers--areas which offer the greatest potential for economic growth. This concept of growth centers identification was initially established by the Economic Development Administration as a guide towards sound public works and capital improvements investment following the premise that investment in stable or growing economic areas would create "spinoff" effects and thereby benefit surrounding depressed or less-endowed areas. The following narrative discusses the extent and character of the growth centers of the three-county area composed of Madison, Monroe and St. Clair Counties.

The identification of a growth center in the seven-county area, of which Madison, Monroe and St. Clair Counties constitute the urban core, is a difficult task. Although many cities and areas within the planning area offer significant potential for economic development, the industrial employment centers of the area have traditionally centered on the communities of Alton-Wood River, Granite City, and East St. Louis. Although population growth in each of these communities in the 1960-1970 decade was well below the regional level for the same period, they, nevertheless, remain as the major industrial employment centers of the area. While the population exodus to the suburbs during the 1960's was evident in the three-county area, a similar shift in the basic employment centers was not experienced. The strong industrial base of the area generally corresponds with the communities noted above, and will not likely shift to the centers of accelerated population growth.

As noted in the land use plan, the greatest concentration of available industrial land lies in an area extending roughly from the Alton vicinity southward through Granite City and East St. Louis, generally in a band paralleling the Mississippi River. It is in this area that the greatest potential for industrial growth is expected to occur. The factors which gave impetus to rapid industrial growth early in the century such as proximity to St. Louis as a service center, the availability of good industrial land, and availability of transportation facilities will likely continue to stimulate such growth in the future.

A second element, which when considered, illustrates the necessity of expanding the conceptual growth center, is the importance of service and light industrial activities which proportionately employ more people than do the basic industries. Many of the service-type industries have tended to follow population growth patterns. This growth has occurred at an accelerated rate in the corridor which unites Belleville and Alton. Throughout its extent, this growth corridor has been the focus of rapid commercial-industrial development from the outskirts of Alton, through Wood River and Edwardsville, and south through Glen Carbon, Maryville, Collinsville, Fairview Heights to Belleville on the south.

Thus, the three-county area contains within its boundaries two different types of economic growth centers (corridors): one existing as a natural industrial growth area, and the other as a commercial-industrial-residential growth area.

The identification of major growth centers does not preclude the development of subgrowth centers as are in evidence in many parts of the three-county area. The freestanding rural communities contribute greatly to the economic potential of the area and, indeed, provide localized areas with employment opportunities and municipal revenues.

Project Development

In addition to the EDA growth center potential, there are a number of specific projects which, if implemented, would act as accelerators of economic development. Each of these projects carries with it the potential to change projected economic trends and thereby increase the overall development situation in the three-county area. These selected projects include, but are not limited to, the following developments:

- Metropolitan Area Airport
- River Port Development
- Coal Gasification and Liquefaction

The impact of these projects, and others, are discussed in detail in Chapter VI of this report.

IV. POPULATION

Knowledge of the number and characteristics of people that reside in the region, both presently and in the future, is essential to the planning process. A plan is an organized arrangement and recommended reaction to the perceived needs and desires of people. Its purpose is to provide an efficient and achievable scheme for meeting these identified needs and desires. In the case of land use planning, the number of people present and their characteristics are of extreme importance because the use to which the land is put is dependent on both the quantity of people, their distribution, and their needs for different land uses. Therefore, a land use plan must examine the characteristics of the present population and project the future population. The various land uses shown in the plan are based on the projected population and its projected needs. This chapter discusses the past population trends, the makeup of the present population, and the projected population to the year 2000.

PAST TRENDS

Although an identification and analysis of population trends over a period of years can sometimes be misleading, such an approach does offer a method of predicting what will happen in the near future if conditions affecting population remain constant or very similar. The most useful population trends to examine for land use planning are the size of the population and the distribution of the population within the region. Some such population figures for Madison, St. Clair, and Monroe Counties are available for as early as 1800. Hosever, due to county boundary changes during the 1800's, meaningful trends cannot be discerned until after 1900 (see Table 1, Appendix A).

The trend in population size for Monroe County shows a decrease for the first three decades of the twentieth century. Starting after 1930, the trend reversed, and the county began increasing at a slightly increasing rate. Madison and St. Clair Counties have shown a parallel trend in the change in their populations. They both have been increasing since 1900. The rate of growth has consistently been comparable for these two counties, ranging from a low of 4 percent to a high of 39 percent. The one exception where the rates where significantly different occurred between 1920 and 1930, when Madison County grew by 35 percent while St. Clair County increased by only 16 percent. The rates of population growth for both counties decreased during the 1960's.

The 1970 population reported for the subject counties is 250,934 for Madison, 285,199 for St. Clair, and 18,831 for Monroe. In Madison and St. Clair Counties, the large majority of these people lived in areas classified as urban,1/ 72 percent and 83 percent, respectively. Monroe County had an

---

1/Settlements containing 2,500 population or greater.

approximate total of 47 percent living in urban areas. During the 1960's, both the urban and rural populations increased in Madison and Monroe Counties, while only the urban population increased appreciably in St. Clair (see Table 2, Appendix A).

The trends in population distribution within each county can be further examined through analysis of changes over the last 20 years in the percentage of the total population accounted for in each precinct or township. This form of analysis allows for the identification of population shifts in different areas of a county. In Monroe County, two precincts, Columbia and Waterloo, have increased in their share of the total population. Together, they accounted for 62.3 percent of the county total in 1970, while this figure for 1950 was only 53.1 percent. Four precincts decreased in their percentage of total population, with Renault Precinct having the largest relative decrease.

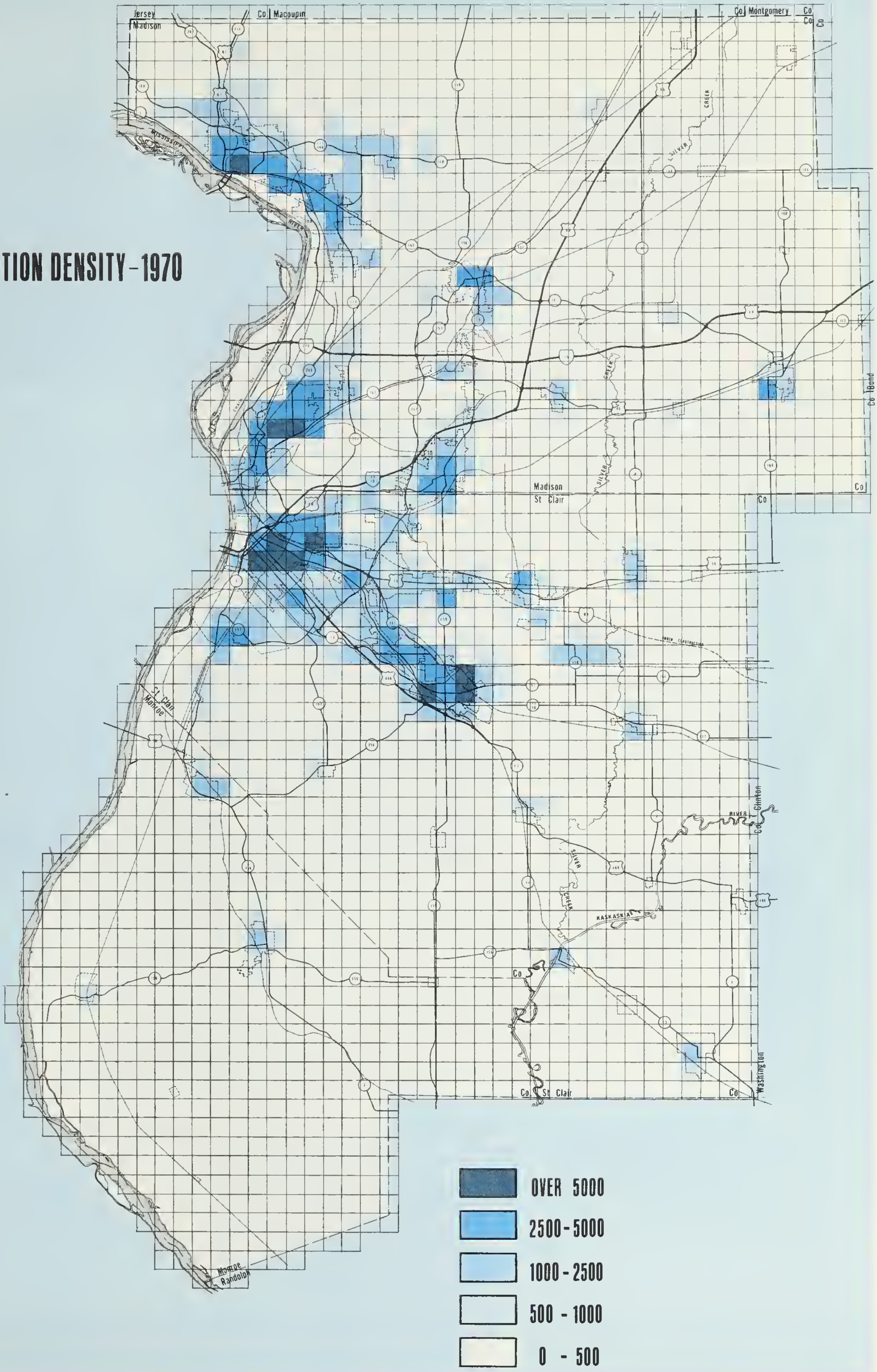
The St. Clair County data indicates that five townships increased in their relative proportion of the total county population. Caseyville and Centreville Townships realized the largest proportionate increase, while O'Fallon, St. Clair and Stookey Townships accounted for most of the remaining increase. In 1950, Caseyville and Centreville Townships contained 11 percent of the county population. In 1970, this figure increased to 23.3 percent. East St. Louis Township lost the greatest amount of people during the 1950's and 1960's, decreasing from 40 percent of the St. Clair County total to 24.5 percent.

In Madison County, four townships showed a significant increase in their relative proportion of the total population between 1950 and 1970, while three reported a decrease. Chouteau, Collinsville, Godfrey, and Granite City Townships increased their percentage shares of total county population from an aggregate 27.7 percent in 1950 to 36.4 percent in 1970. The three townships of Alton, Venice and Wood River had a relative decrease in percentage of total population from 46.9 percent in 1950 to 37.1 percent in 1970 (see Tables 3, 4 and 5; Appendix A).

The 1970 distribution of population densities for Madison, St. Clair and Monroe Counties are shown on Plate 8. These distributions represent the results of the population trends up to 1970. In St. Clair County, the highest population densities were located in the northwestern section of the county. Belleville and East St. Louis contained the most densely populated areas in the county, while Cahokia also had a relatively high density. The areas of highest population density in 1970 in Madison County were located in the western half of the county. The Cities of Alton and Granite City had the areas of highest population density, while other areas of relatively high density included the Cities of Madison, Venice, East Alton, Edwardsville, Collinsville, Highland and Godfrey Township. Monroe County's population was much less dense than the other two counties in 1970. The two areas of relatively concentrated population in the county were Waterloo and Columbia.

plate 8

POPULATION DENSITY-1970



The projected pattern of population density for the year 2000 is discussed in following report sections dealing with county and regional population projections.

PRESENT POPULATION PROFILE

Identification and analysis of the characteristics of the present population provide a basis for projecting needs of the future. Information concerning the current residents indicates which types, forms, and amounts of land uses are likely to be required in the future. Several of these characteristics are described below with statistical summaries provided in Appendix A.

The age of the present population is an important indicator of future changes. The data on the 1970 age-sex makeup of the three counties is presented in Plate 9. In St. Clair County, the median age of the 1970 population was 26.8 years old. This represents a decrease from the 1960 figure of 28.7 years and the 1950 figure of 30.5 years of age. The majority of St. Clair County residents in 1970 were either school aged, i.e., 5-19 years old, or in the middle adult years of 25-54. The number of children under 5 is several thousand less than the number between 5 and 9. These statistics indicate that, unless a large number of 5-10 year olds move into the county, an overall decrease in the number of grade school students can be expected in the next five to ten years.

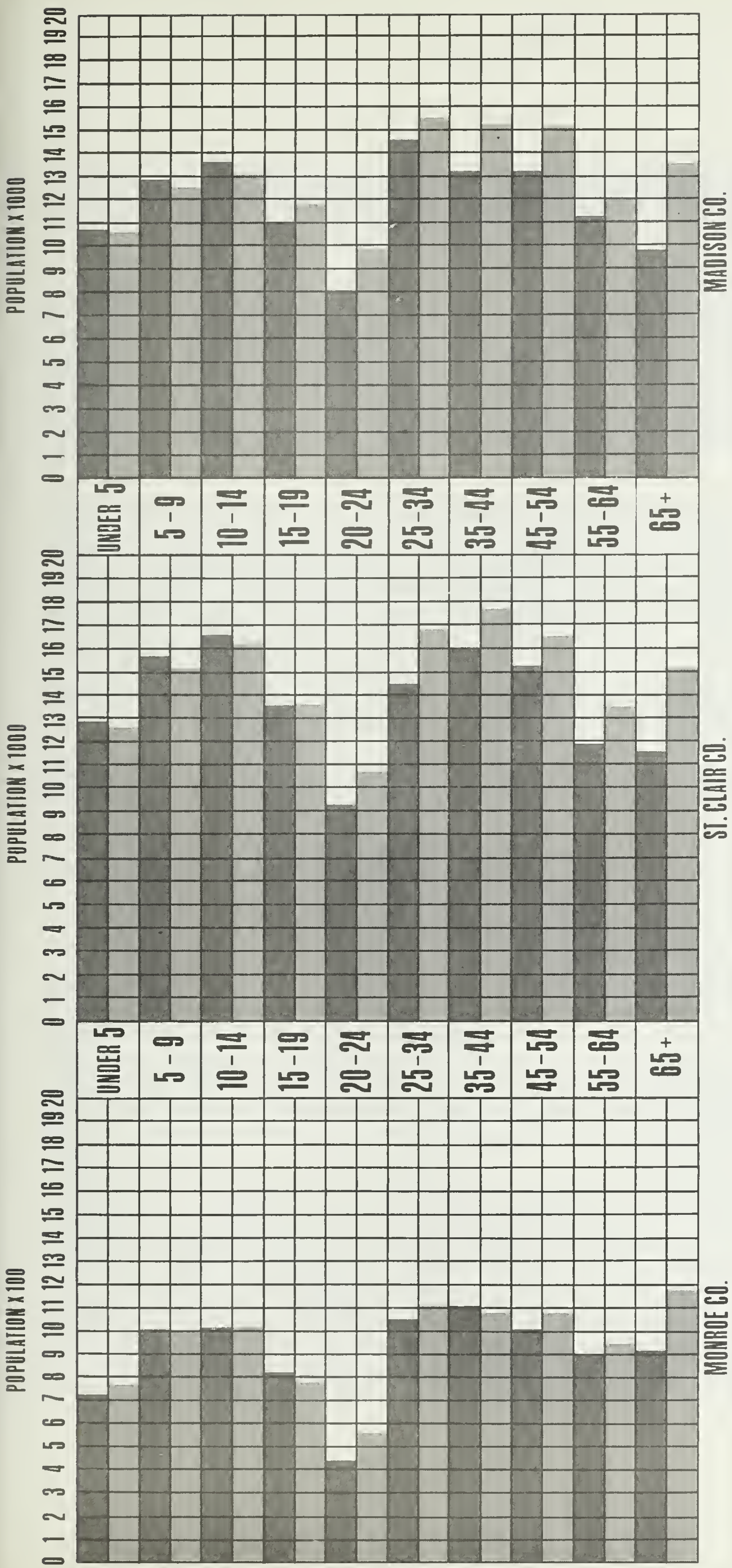
Madison County showed the same general pattern as in St. Clair County in 1970. The median age for Madison County residents decreased to 28.4 years in 1970 from 29.5 years in 1960 and 30.7 in 1950. The difference between grade school and pre-school age children was smaller in Madison than in St. Clair County, although still significant.

Monroe County presented a somewhat different population pattern than those observed in either Madison or St. Clair. The population in this county tended to be older in 1970 than in the other two counties, although Monroe County's population did grow younger during the 1960's. Between 1960 and 1970, the median age dropped from 32.0 to 29.8. The number of Monroe County residents in the 20 to 24 age group in 1970 accounted for only 5.3 percent of the total Monroe County population. This compares to about 7.0 percent in this age bracket in both Madison and St. Clair Counties. Such statistics indicate a relatively small proportion of the county's future total population will be entering the child-bearing years of early adulthood if the trend of people in their early twenties leaving the county continues.

The racial makeup varies substantially among the three counties. In Monroe County, the percentage of the population which is of the Caucasian race was over 99 percent in both 1960 and 1970. Madison County's population was about 95 percent Caucasian and 5 percent Negro in 1960 and 1970. The black population is insignificant in Monroe County, and it has increased in Madison County, but remained a constant percentage of the total population.

1970 AGE-SEX DISTRIBUTION

MADISON, ST. CLAIR & MONROE COUNTIES



1960 Median Age 29.5
1970 Median Age 28.4

1960 Median Age 28.7
1970 Median Age 26.8

Male ▨ Female ▨

1960 Median Age 32.0
1970 Median Age 29.8

Source: U.S. Census of Population 1970

The minority population in St. Clair County has increased both in absolute numbers and as a percentage of the total number of people during the 1960's (see Table 9, Appendix A).

The educational characteristics reported in Madison, St. Clair and Monroe Counties in the 1970 Census of Population show that during the 1960's the general level of educational attainment rose in all three counties. Nursery school through high school enrollment also increased greatly in these counties during the 1960-1970 decade. It is anticipated, as stated previously, that this enrollment increase will change to a decrease in the near future due to a decrease in births in the last several years (see Table 15, Appendix A).

Two other statistics on characteristics of the present population which have a bearing on the makeup of the future population are the size of the average household and the commuting patterns of workers. The average household size throughout the three-county region decreased between 1960 and 1970, but continues to exceed three persons per household in all three counties. Over half of the workers in Madison and St. Clair Counties worked in their county of residence in 1970. The percentages were 62.2 percent and 58.9 percent, respectively. In Monroe County, less than half (42.5 percent) of all workers worked inside of the county (see Tables 13 and 17, Appendix A).

The three principal factors which directly affect population change are births, deaths, and migration. The difference between births and deaths is referred to as the natural change in the population. In all three counties, the number of births has been decreasing since 1960. The number of deaths has been increasing in that same period in Madison and St. Clair Counties, while decreasing in Monroe County. When computed on the basis of number of deaths per 1,000 persons, the increase in Madison and St. Clair Counties is not great. However, the decrease in Monroe County is dramatic; the number of deaths per 1,000 people went from 12.64 in 1960 to 9.24 in 1970. Another useful measure, the number of children under 5 per female of child-bearing age (15-49), shows that there were less children for each female in this age group in 1970 than in 1960. The 1960 figure for the three counties ranged from .50 to .55, while in 1970 the range was .35 to .37. These figures indicate that the rate of natural increase in the three counties is remaining constant or decreasing (see Tables 11 and 12, Appendix A).

The third component of population change, migration, has become increasingly important in the mobile society of the United States. The number of people moving into Madison County increased by about 3,000 from the 1960-1965 period to the 1965-1970 period. Monroe County experienced a migration increase during the same periods of approximately 600 persons. The St. Clair County migration trends decreased by approximately 6,000 people. The people moving into Madison County came almost evenly from Illinois and from other states. The in-migration to Monroe County came mostly from Illinois. In St. Clair County, the great majority of the people migrating into the county came from outside the State of Illinois. The increase in population attributable to migration is decreasing in St. Clair County, but increasing in Madison and Monroe Counties (see Table 14, Appendix A).

FUTURE POPULATION

In order to determine the future land use needs of an area, it is necessary to project future population. By projecting population and allocating it on a small-unit basis, it is possible to anticipate the number and location of future residents and thereby plan for their needs.

Projection Methodology

Thus, in order to provide a sound planning basis, it was necessary to prepare population projections for the three-county study area. This section presents those projections along with a general discussion of the methodology used in their preparation.

The population projections for Madison, St. Clair and Monroe Counties were based upon projections prepared previously by the State of Illinois, Office of Planning and Analysis (OPA). The basic projection system employed by OPA was the "step down" or "ratio" method. In this method, projections were first made at the state level for the following demographic categories:

(1) industrial employment,
(2) population and labor force,
(3) personal income by major component and industrial source,
(4) households by size and sex of head, and
(5) income size distribution of consumer units.

These projections were then "stepped down" for metropolitan areas and broad non-metropolitan substate regions.

The projections for Madison, St. Clair and Monroe Counties used in this study were prepared by adjusting the OPA county totals. These adjustments were based upon previously established studies and projections within the region and its communities which indicate intra-regional variance in some instances from the OPA macro-level statewide methodology. The studies included, for example, the Population and Economic Base Study: Madison and St. Clair Counties, studies executed within individual communities such as community plans, previous SIMAPC population projections, and the SIMAPC Regional Land Development Potential Study. The resulting county projections were restricted to within plus or minus 5 percent of the original OPA projections, except in Monroe County where the recent announcement of plans for the construction of a large-scale planned unit development will greatly increase that county's future population.

Using the adjusted county projections as a base, the projections were disaggregated to townships, communities, and a system of 5,000-square-feet grid cells. This was based upon the identification and analysis of development trends and policies as derived from existing adopted community, county and functional plans. Also considered were current development proposals having potentially significant impacts and high probabilities of implementation. In addition, a cursory examination was made of available development records such as building permits, housing starts, and mortgage and loan statistics.

Assumptions - In preparing the county, township and municipal projections, the following assumptions were made:

(1) That no major national or international catastrophe will occur during the planning period;

(2) That the national economy will not suffer any severe depression or decline in the gross national product;

(3) That the State of Illinois OPA employment and population projections are generally representative for the "region";

(4) That the following major development projects within the region will be completed: Kaskaskia Canalization, current and long-range Illinois Department of Transportation highway improvements, St. Clair Square and Westpark Centre commercial nodes, Cottonwood Station and Chapel Spring Planned Unit Developments.

(5) That future development will be consistent with presently established local and regional development goals and policies;

(6) That the urban counties within the seven-county region (Illinois Revion IV) would continue to grow at faster rates than rural counties;

(7) That within urban counties, principal urban centers would grow faster than smaller isolated communities and rural settlements;

(8) That projected community growth would occur through:

  (a) natural increase,

  (b) internal development and redevelopment at somewhat higher densities than which currently exist,

  (c) annexation of additional territory to encompass further development land uses and population; and

(9) That because of the expansion of communities through annexation, as well as continuation of existing trends toward larger farms with fewer farmers, populations within rural areas would increase numerically but at a lower rate than in urban areas.

Summary - The Illinois County OPA population projections were initially accepted as control totals for the counties and region. OPA-derived statistics were then reassessed on the basis of previous studies and pertinent detailed information concerning the three-county area. The county totals, with the exception of Monroe County, were subsequently adjusted to OPA projections on a plus or minus 5 percent basis. Assumptions were then made as a basis for the development of township, municipality and grid cell projections. Although these assumptions excluded possible major impact variables, such as the metropolitan airport and the rapid transit system, they did consider a number of unique development projects which will most probably result in a somewhat higher population increase in certain areas than was projected by OPA. Based upon these assumptions and the adjusted county projections, projected populations were allocated on a township, community and metropolitan grid system basis.

Population Projections

Madison, St. Clair and Monroe Counties are all projected to increase in population during the planning period. St. Clair County will continue to be the most heavily populated of the three counties although Madison County is projected to experience the greatest absolute increase in population (see Table 4.1). Monroe County, however, is projected to experience the greatest percentage increase due to the proposed new town development and to the expected growth of the existing communities of Columbia and Waterloo which are situated on the fringe of the present urbanized area.

Although most of the region's townships are projected to increase in population, the most intensive growth is expected to occur within a relatively few townships in each county (see Appendix B). The Townships of Godfrey, Fort Russell, Jarvis, Edwardsville and Collinsville are expected to experience the most dramatic growth in Madison County, while Caseyville, O'Fallon, St. Clair and Stookey Townships are expected to experience rapid growth in St. Clair County. Columbia, New Hanover and Waterloo Precincts are projected to receive the bulk of Monroe County's growth.

Most of the region's population growth is expected to occur within and adjacent to many existing communities (see Appendix B). Principal growth areas of Madison County include the urban centers of Granite City, Alton-Wood River, and Edwardsville-Collinsville-Troy. In St. Clair County, major growth areas include the communities of Belleville, O'Fallon and Fairview Heights. It

Table 4.1
PROJECTED POPULATION INCREASES FOR MADISON, ST. CLAIR AND MONROE COUNTIES
1970 - 2000

	Madison County		St. Clair County		Monroe County	
Year	Pop.	% Change	Pop.	% Change	Pop.	% Change
1970	250,934	5.5*	285,199*	4.1	18,831	9.7*
1975	269,345	7.3	297,235	4.2	20,793	10.4
1980	287,550	6.8	309,000	4.0	25,400	22.2
1985	307,595	7.0	325,545	5.4	30,375	19.9
1990	327,700	6.5	342,990	5.5	35,350	16.4
1995	346,900	5.9	360,435	5.1	39,375	11.4
2000	366,550	5.7	378,780	5.1	43,400	10.2
Total Change (1970-2000)	115,616	46.1	93,581	32.8	24,569	130.4

*1965-1970 estimate.

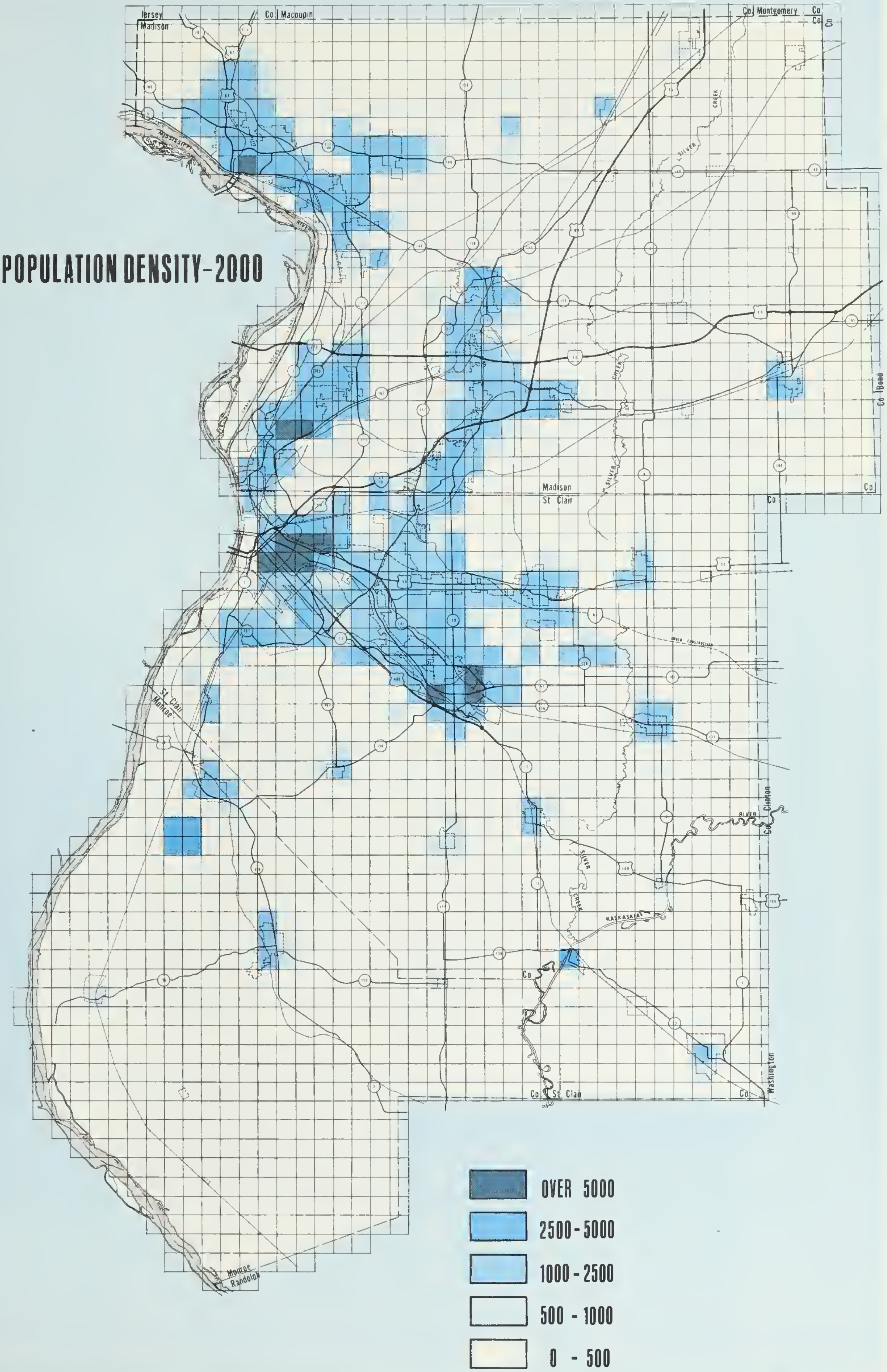
Source: Southwestern Illinois Metropolitan and Regional Planning Commission, 1974.

should be noted, however, that the bottomland communities of East St. Louis, Fairmont City, Cahokia, Centreville, Alorton, and Brooklyn will collectively experience less intensive growth than the upland communities of St. Clair County. As noted previously, the existing communities of Columbia and Waterloo and the proposed Chapel Spring new town are expected to receive the bulk of that county's growth.

The general distribution of the region's projected 2000 population is shown in Plate 10. A comparison of Plates 8 and 10 shows that the region's principal growth corridor lies in a band paralleling the bluffs from the Godfrey area on the north to the Columbia-Chapel Spring area on the south. Secondary growth centers are located adjacent to existing urban centers of the American Bottoms such as Granite City. These major and secondary growth areas generally correspond to the region's land having the highest development potential as discussed in Chapter II (see Plate 4).

plate 10

PROJECTED POPULATION DENSITY-2000



V. LAND USE PLAN

Physical characteristics and economic, social, and technological conditions influence the manner in which growth and development occur within the region. However, the region's growth and development are ultimately determined by the actions and decisions of numerous individuals, agencies, and units of government. Thus, if the region is to grow and develop in a rational manner, there must be some guiding or coordinating process. Land use planning is a key element of such a process. Land use planning is concerned primarily with guiding and coordinating the best use of the land. However, it is a major in-put to other aspects of planning since it establishes the areal characteristics of population and development. To achieve its purposes, land use planning considers the effects and the relationships of existing land use patterns, known and anticipated development trends, as well as existing and projected population in conjunction with accepted design principles and standards. The land use plan for Madison, St. Clair, and Monroe Counties has been prepared by taking these various considerations into account.

METHODOLOGY

The recommended regional land use plan for the year 2000 was developed through a sequence of research, analysis and projection. The process began with the determination of regional land use categories and the establishment of design principles for each of those categories. It then proceeded with the collection of data concerning the region's historical and present physical, economic, and social development patterns. Subsequent analysis of these data resulted in the identification of those physical, social and economic factors which have affected past urban land use development and which, therefore, might realistically be expected to affect the future growth and development of the three county region. This analysis provided the framework for establishing existing development trends and also provided insight into the region's past, present and expected future development resources and constraints. The next step in the process was the projection of future land use requirements, based principally on population projections (Chapter IV) and the incorporation of major recommendations within specialized functional plans and studies previously prepared for the region. The final step was the allocation of future land use based on established trends, projections and design principles.

Determination of Regional Land Use Categories

The number and definition of specific land use categories often vary with the intent of the plan and the size of the planning area. In general, the smaller the planning area, the more numerous and specific are the classifications of land use. In the development of a site plan, for example, it is often possible to specifically identify each major feature upon an individual parcel of land (such as single-family dwelling, sidewalk, garage, shrubbery, etc.). However, when the planning area is an entire community, the smallest unit of classification is normally the parcel or lot which is classified according to its principal use (such as residential, commercial, industrial, etc.). To identify the specific constituents of each parcel would not only be graphically and statistically impractical, but it would also be of little value at the community planning level. For these same reasons, the amount of illustrative detail must further decrease at the county and multi-county levels.

In order to fulfill the purpose of this recommended tri-county plan and to effectively depict regional development patterns, it was necessary to employ a somewhat generalized land use classification system. The classification system consists of seven major land use categories as follow: 1) general urban, 2) commercial centers, 3) industrial, 4) public/semi-public, 5) conservation/recreation, 6) vacant/agricultural, and 7) thoroughfares. Each category represents a predominant land use type which may include minor scatterings of other uses as shown on Plate 11. These seven major land use categories are described in the following paragraphs.

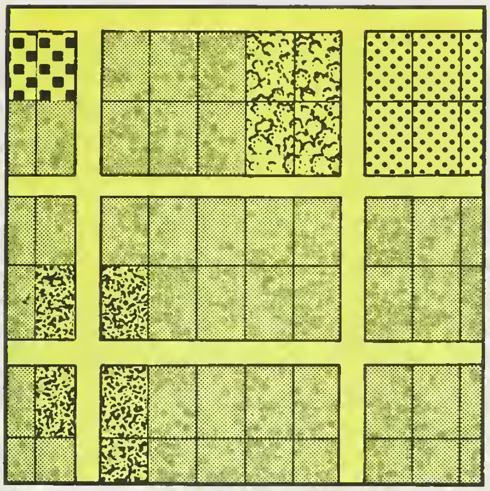
General Urban - The general urban category is comprised of land which is predominantly in residential use. Residential development is primarily of the single family variety, although significant concentrations of multiple-family dwellings may be found near the core of larger communities, along major traffic arteries, or in less concentrated clusters throughout the community. The general urban classification may also include other scattered uses such as small commercial, industrial, public/semi-public and vacant areas, as well as neighborhood and district parks and minor amounts of undevelopable land (see Plate 11). To be classified as general urban, it was determined that an area must also contain an average population density of at least four persons per gross acre and be contiguous with a major area of existing urban development. Thus, areas depicted as general urban on the recommended land use plan generally represent urban areas of sufficient size and density to provide a full range of urban and/or social services.

Commercial Centers - Commercial centers refer to nodes of retail and service activity, but, like the general urban classification, may also have minor quantities of other uses interspersed. These centers have been classified into the three general categories of local, community and regional according to the type or amounts of facilities and services offered by each.[1] Local

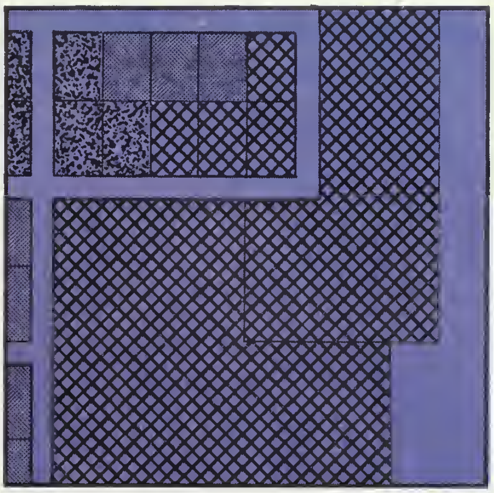
---

[1] Adapted from the Executive Group of the Community Builders Council or Urban Land Institute, The Community Builders Handbook (Washington, D.C.: Urban Land Institute, 1968), p. 265-6.

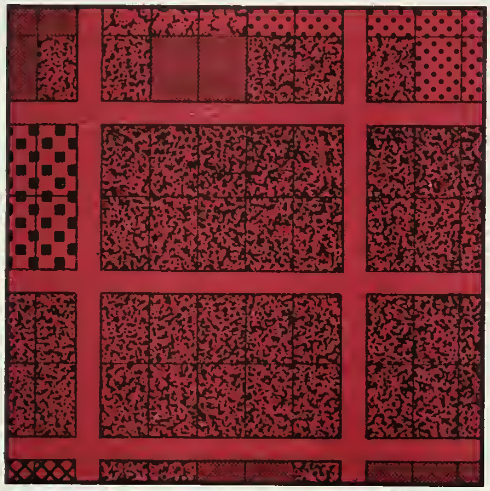
CONCEPTS OF LAND USE CLASSIFICATIONS



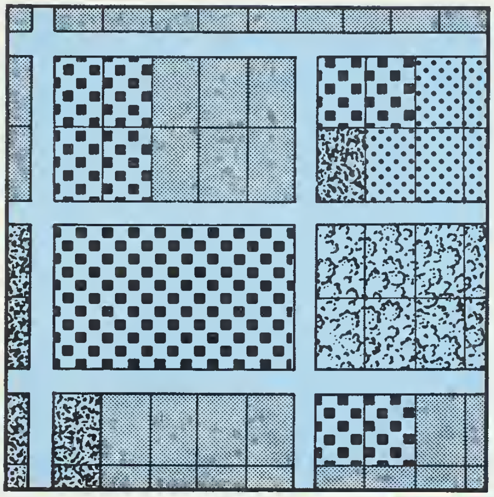
GENERAL URBAN 🟨



MAJOR INDUSTRIAL 🟦

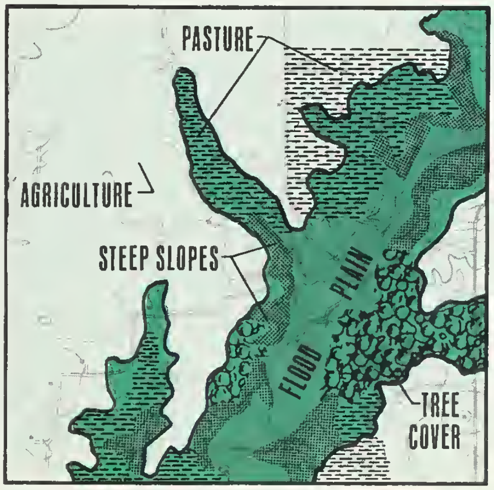


COMMERCIAL CENTERS 🟥



PUBLIC/SEMI-PUBLIC 🟦

- ▒ SINGLE FAMILY RESIDENTIAL
- ░ MULTI-FAMILY RESIDENTIAL
- ▓ COMMERCIAL
- ▦ INDUSTRIAL
- ▩ PUBLIC/SEMI-PUBLIC
- ▤ PARKS



CONSERVATION/RECREATION 🟩
VACANT/AGRICULTURAL ⬜

centers normally have a supermarket as the principal facility and primarily provide for the sale of convenience items and personal services for the day-to-day consumer needs of the immediately adjacent area. However, these centers may also include a limited number of small specialty stores and services establishments.

The community center has, in addition to the commercial facilities of a local center, a junior department store, large variety store or discount center as the dominant facility, and provides a wider range of facilities and services than that offered at the lower level. Regional commercial centers have one or more full-line department stores as the dominant facility, and provide for general merchandise, furniture, home furnishings and apparel in much greater depth and variety than community commerical centers.

Community and regional commercial centers are shown symbolically in the recommended land use plan. Although the use of symbols does not indicate the precise spatial configuration of commercial land, it does provide an indication of the location and scope (i.e., whether regional or community) of commercial activity while remaining flexible in regard to specific development considerations. From a regional planning standpoint, therefore, the use of symbols is considered more appropriate for the designation of regional and community commercial centers. Local centers, because of their predominantly local influence and because of their relatively small acreage requirements, are included in the general urban classification, and thus are not depicted graphically in the land use plan.

Industrial - This category refers to the region's existing and proposed major industrial complexes. These areas are at least 100 acres in size and are devoted primarily to manufacturing, processing, warehousing, or shipping activities. Scattered uses may include streets, vacant areas and minor amounts of residential, commercial and public or semi-public areas. However, the population density of these major industrial areas is normally considerably below four persons per gross acre.

Public and Semi-Public - This category includes only those public and semi-public areas which are of regional significance. These areas include large single ownership uses such as Southern Illinois University, Scott Air Force Base and the Granite City Army Depot, in addition to large concentrations (i.e., at least 100 acres) of separately owned, but contiguous public or semi-public properties such as hospitals, schools, governmental buildings, and so on. Population densities in these areas vary considerably, but generally average less than four persons per acre. Other scattered public/semi-public uses of less than 100 acres, such as governmental buildings and churches, are included in the general urban classification.

Conservation and Recreation - This category includes major recreation areas, such as urban and regional parks, in addition to those areas which are not well suited for intensive urban land use development due to severe physical constraints. Although conservation and recreation areas may contain a variety of small and scattered uses, average population densities are well below four persons per acre, and are usually considerably less than one.

Vacant and Agricultural - This category, includes the rural and other less intensively developed areas of the region. It consists not only of cropland pastureland, woodland and farmsteads, but also scattered residential and non-residential uses as well as small settlements of less than 100 acres. Like the conservation/recreation category, these areas are characterized by low population densities.

Thoroughfares - This category represents the region's system of freeways and major arterial streets and highways. Freeways are divided facilities with controlled access and provide for the movement of large volumes of through traffic. Major arterials are the important traffic facilities which provide for movement between communities and across the region.[2/] The remaining streets and roads of the region including secondary arterials, collectors, county roads and township roads, primarily serve local traffic and are herein referred to as "other roads."

Establishment of Design Principles

Land use design principles are used as a guide to evaluate existing conditions and plan for future needs. They set forth in both general and specific terms the ingredients considered necessary for a desirable land use pattern. Basic design principles are normally used in reference to the spatial inter-relationships of the various land uses, while quantitative means are often used to compare, evaluate and project specific use categories. Following is a description of the design principles used in development of the recommended regional land use plan for the year 2000.

General urban development should be compactly balanced around common nodes of activity such as commercial, recreational and/or governmental centers. Development should be compact and contiguous in order to facilitate the economical provision of urban services such as water systems, sewer systems, parks and other public facilities. A land use pattern in which general urban development is balanced around common activity centers usually provides greater accessibility and convenience, resulting in stronger community and regional cohesion.

[2/] Adapted from East-West Gateway Coordinating Council, Roadway Functional Classification Study for the St. Louis Area (St. Louis 1973), pp. 15-16.

Commercial nodes should be situated in areas easily accessible to residents of the surrounding urban area or region. Community commercial centers should be distributed evenly throughout the urban area in order to provide conveniently accessible commercial facilities to the population centers of the region. This usually requires that these areas be located at the intersection of major arterials or collector streets. Regional centers, because of their wide range of facilities and correspondingly larger service areas, should be situated at points readily accessible from the entire region. Thus, regional commercial centers should be located at the intersections of major arterials or freeways as well as in close proximity to mass transit lines and facilities. The facilities within commercial centers should be grouped together as much as possible in order to avoid interference with nearby residential areas and to avoid dangerous traffic congestion.

Industrial areas should be concentrated along transportation corridors and separated from incompatible uses. These areas should be easily accessible for the movement of both employees and materials. Large industrial sites should therefore be located near major thoroughfares and often times be also provided with efficient rail and/or barge facilities.

Conservation and recreation areas should accommodate non-intensive uses. These areas are often well suited for urban and regional parks as well as other non-intensive uses including certain agricultural and in some instances, low density residential development. Urban parks are sub-regional facilities which are provided primarily to give the urban dweller an opportunity to get away from the noise and congestion of the city without having to travel a great distance. These parks often provide lakes, woodlands and varying topography and usually offer a variety of recreational facilities. Regional parks, as the name implies, serve the entire region and may contain up to several thousand acres. The types of facilities normally found in regional parks include campgrounds, picnic areas, nature areas, trails, golf courses and botanical gardens.

Accepted design standards for urban and regional parks are presented in Table 5.1.

Table 5.1
URBAN AND REGIONAL PARK STANDARDS

Type of Park	Acres per 1,000 Persons	Minimum Acreage
Urban	5	100
Regional	20	250

Source: National Recreation and Park Association, National Park, Recreation and Open Space Standards, Washington, D.C.

A region's thoroughfare system should provide for the safe and efficient movement of traffic within, to and from the region. This is usually best accomplished by designing the throughfare system as a continuous network of freeways and major arterials. Freeways should be spaced from 1 to 5 miles apart and should carry 30 to 45 percent of the region's traffic. They should be multi-lane, divided roads with grade separation and interchange ramps.[3] Major arterials should provide service through urban areas with spacing from one-half to two miles. These facilities should provide limited access to abutting property and should be subject to the necessary control of entrances, exits and curb use. Intersections of major arterials should be limited in number and should be at-grade, channelized and provided with signal synchronization.

Collection and Analysis of Data

Existing land use data utilized in this study was obtained from both primary and secondary sources. Land use data was first compiled from previously existing county and community plans. Since many of these plans are now several years old, it was also necessary to update much of this information through the use of aerial photographs and windshield surveys. This revised and updated land use data was then summarized and mapped as existing urban development.

Previously established development goals, objectives, policies and proposals were obtained from existing comprehensive and functional plans and studies as well as SIMAPC's on-going FY 1974 formulation of Illinois Region IV Goals and Objectives. These factors, in conjunction with the revised existing land use data and population projections, were then used as a basis for projecting future land requirements and allocating recommended future land use patterns.

DEVELOPMENT TRENDS

Present patterns of development have evolved from past patterns. Thus, it follows that the present patterns will influence and govern to a large extent the character of future patterns of development. Accordingly, historical development trends, the nature of existing conditions, and the possible effects of definable anticipated trends have been considered in preparing the land use plan for Madison, St. Clair and Monroe Counties.

Historical Development Trends

A number of geographic factors have profoundly influenced the character of growth and development in the St. Louis Metropolitan Area of which the three county study area is a part. Because of its strategic location with respect to the nation's inland waterways, initially, the later nationwide development of railroads, and the more recently developed highway network, the St. Louis metropolitan area developed into a major transportation hub, and consequently also as a major industrial center within the Mid-West. The fact that the City of St. Louis grew into the dominant urban center of the metropolitan area rather than some community within the three county study area is attributable to a variety of reasons of which the area's physical characteristics are significant.

---

[3] Ibid. p. 16.

The City of St. Louis was founded on the Missouri bluffs which afforded its original settlers protection from flooding by the adjacent Mississippi River. As major transportation facilities focused upon the St. Louis area and commerce and industry grew, urban growth intensified and spread. St. Louis City grew outward to the west along major transportation arteries. Satellite communities such as Kirkwood, Webster Groves, and Florissant were eventually met and encompassed by the urban growth that had extended outward from the central city. In contrast, the urban growth spurred on by increasing economic activity did not occur similarly across the river.

The Illinois communities of Alton, Belleville, Edwardsville, Collinsville, and Columbia, for example, developed as true satellite communities. Each was founded on the bluff line that forms the eastern boundary of the American Bottoms. In most cases, these satellite communities did not have any highly interrelated social or economic interdependence with the heavy industrial, company towns which developed within the American Bottoms in proximity to the major transportation facilities converging on St. Louis. Historically, the economic base of the upland communities was either agricultural or coal mining. Because of the socio-economic separation, there was no distinct central city in the three-county study area. The East St. Louis, Granite City, and Alton/Wood River urban complexes were independent entities that lacked the prestige of being the cultural or financial center of the metropolitan region. The American Bottoms served as a physical constraint to the outward urban growth of these areas. Levees in the American Bottoms protected the land adjacent to the river while the remaining broad expanse of land adjacent to the bluffs remain an unprotected lowland subjected to periodic internal flooding. In effect, the drainage and soil conditions of the American Bottoms created a physical barrier between the inlying urbanized area and the satellite communities upon the bluffs. The historical urbanization within the three county study area resulted in fragmented and dispersed satellite communities.

Existing Conditions

Regional planning (or for that matter planning in general) is a comparatively recent undertaking in the three county study area. Thus, during the past many years of little or no guidance and coordination, historical development trends, adverse physical characteristics of the area, locations of major rail and highway facilities, and the locational advantages of the American Bottoms have influenced or determined the study area's existing pattern of development and related problems and deficiencies.

Existing Land Use - As illustrated on Plate 12 and indicated by Table 5.2, the major concentrations of urbanization are found within the westerly portions of Madison and St. Clair Counties. The balance of the study area's urbanization consists of scattered small to medium size free-standing communities located in Monroe County and the easterly portions of Madison and St. Clair Counties.

Table 5.2
EXISTING GENERALIZED LAND USE DATA
MADISON, ST. CLAIR AND MONROE COUNTIES

	No. of Acres by Land Use Category					
Planning Area	General Urban	Major Commercial	Major Industrial	Major Public & Semi-Public	Major Recreational	Total
Madison County:						
*PD #1	12,174	485	6,405	1,272	441	20,777
PD #2	5,674	149	2,700	1,118	-	9,641
PD #3	2,052	-	-	-	-	2,052
PD #4	6,823	440	100	2,677	-	10,040
PD #5	1,169	-	-	-	740	1,909
TOTAL	27,892	1,074	9,205	5,067	1,181	44,419
St. Clair County:						
PD #1	12,680	383	5,818	765	1,480	21,126
PD #2	13,652	279	-	343	-	14,274
PD #3	3,932	-	-	2,226	109	6,267
PD #4	1,916	-	-	-	250	2,166
PD #5	1,113	-	-	-	178	1,291
TOTAL	33,293	662	5,818	3,334	2,017	45,124
Monroe County:						
TOTAL	3,112	404	-	-	-	3,516
GRAND TOTAL	64,297	2,140	15,023	8,401	3,198	93,059

*Planning District

Source: Southwestern Illinois Metropolitan and Regional Planning Commission.

The major concentrations of urbanization within Madison County consist of the Alton-Wood River general urban-industrial complex and the Quad-Cities general urban-industrial complex. The Alton-Wood River area is located in the northwest portion of Madison County adjacent to the Mississippi River and partially within the American Bottoms area. The Quad-Cities area is located within the southwest portion of the County adjacent to the river, but entirely within the American Bottoms. While these two major general urban complexes have generated significant growth and development in the past, that portion of the American Bottoms which separates them is relatively void of development.

Although not presently as intensely developed as the American Bottoms oriented concentrations, another significant concentration of general urban development in Madison County is the linear development occurring in proximity to Illinois 157 and 159 between Collinsville and Edwardsville. In contrast to the Alton-Wood River and Quad-Cities areas which account for nearly two-thirds of the study area's major industrial land, the Collinsville-Edwardsville corridor is void of any major concentrated industrial activity.

Most of the urbanization in St. Clair County is concentrated in the northwest portion of the county; and particularly in the general urban corridor between the core area of East St. Louis and the Belleville central business district. General urban development also extends from the East St. Louis area in two other corridors. These land use masses are comprised of the corridor that extends eastward along U.S. Highway 50 and I-64 through Fairview Heights to O'Fallon, and the corridor that parallels the Mississippi southward to Dupo.

As in the case of Madison County, the bluff and upland areas of St. Clair County are currently void of major industrial concentrations. St. Clair County's major industrial areas, which account for the balance of the study area's major industrial acreage, are concentrated in the American Bottoms in proximity to the greater East St. Louis general urban area.

Existing major commercial centers serving the study area are distributed in accordance with population concentrations and highway accessibility. Major commerical centers within the study area are located along major highways and at major highway intersections, and with the exception of the commercial node at Highland, follow the concentrations of general urban development within the westerly planning districts of Madison and St. Clair Counties. By and large, major commercial centers consist of comparatively recently developed shopping centers, while the older central business districts account for a diminishing share. Although considerable activity in developing new major commercial centers is taking place within the study area, the dominance of regional commercial areas located in the City of St. Louis and St. Louis County is still quite evident. As defined by the land use classification system described earlier, practically all of the major commercial centers within the study area fall within the community commercial category. The recently emerging regional commercial center located in Fairview Heights is the only major commercial center within the study area that is more than sub-regional in character.

As indicated on Table 5.2, there are nearly 3,200 acres of developed major public recreational areas in the study area. Nearly two-thirds of this total acreage, or 2,090 acres, comprise three regional facilities which consist of Frank Holten and Cahokia Mounds State Parks located in St. Clair County (Planning District #1) and Silver Lake located in Madison County (Planning Disctict #5). While the three regional facilities located within the study area and other regional facilities located within the greater metropolitan area have enough acreage to statistically satisfy existing and long-range requirements for regional facilities, closer and more conveniently located regional facilities are also desirable. The balance of over 1,100 existing acres in recreational use is comprised of seven urban parks, five of which are located at scattered locations in St. Clair County. The other two urban parks comprising a total area of 441 acres are located in Madison County Planning District #1. Although the total urban park acreage is impressive on the surface, more in-depth analysis indicates major deficiencies. Madison County has only one-third of its recommended existing urban park acreage. St. Clair County has only about one-half of its recommended existing urban park acreage. Monroe County has no urban parks.

Major public and semi-public land uses of the study area are located within Madison and St. Clair Counties, and consititute significant land areas. Such uses include a variety of activities ranging from educational to military. The more significant major public and semi-public uses in Madison County consist of Alton State Hospital and Civic Memorial Airport in Planning District #1; Granite City Army Depot in Planning District #2; and Southern Illinois University in Planning District #4. In St. Clair County, the more significant public and semi-public uses consist of Parks College and Bi-State Airport in Planning District #1; Belleville Area College and Our Lady of the Snows in Planning District #2; and Scott A.F.B. in Planning District #3. Within both counties other major public and semi-public land use areas consist of comparatively smaller areas used for religious, educational, governmental, and health purposes.

Although urbanization within the study area is extensive, vacant and agricultural areas dominate all land use categoreies. Vacant and agricultural areas account for nearly 80 percent of the land area of Madison and St. Clair Counties, and in excess of 90 percent of Monroe County's land area. The largest expanse of vacant/agricultural land consists of the rural upland areas of easterly Madison and St. Clair Counties and the rural American Bottoms and upland areas of Monroe County. In addition to the natural physical characteristics which have precluded development of many vacant areas, the St. Clair County portion of this vast vacant/agricultural area encompasses both active and inactive strip mine areas. With respect to the urbanizing portion of the study area, substantial vacant/agricultural areas project into and between the corridors of urban development. The most significant of such vacant/agricultural areas is that portion of the American Bottoms that separates the older industrial urban areas near the Mississippi from the peripheral urbanization occurring along the bluffs and upland areas.

Problems and deficiencies of the study area's land use and consequently other related functional, environmental, and socio-economic concerns such as housing, recreation, utilities, employment opportunities and centers, and transportation are numerous, varied and interrelated. However, the major or overall problems and deficiencies of the study area's land use can be summarized as a lack of sound overall structuring. Focal points or centers are ill-defined. Development is either scattered, fragmented or otherwise loosely related. Within the major land use categories considered and delineated by this study, aggregate land uses are frequently found mixed in incompatible relationships. Often, areas have been used inappropriately. For example, areas that because of their unique physical advantages or disadvantages are better suited for agricultural, recreational, or conservation uses have been allowed to become intensively developed. There is a general lack of cultural and recreational facilities within the area; and those that do exist are often underdeveloped. Commercial centers, particularly those comprising the central business districts of older core communities, are not well developed and are often characterized by obsolete facilities. Similarly, many major industrial areas contain obsolete facilities including installations such as old multi-story factories and rail yards which in many instances are no longer adequate to satisfy or meet today's requirements of speed and efficiency. Finally, as will be discussed further in the following section, the area also suffers from poor internal circulation in many portions due to mislocated or undersized transportation facilities.

Existing Transportation Facilities - Transportation facilities, both present and future, have a profound influence on the development of the area in terms of land usage, economic development, and the general welfare of the area. Since transportation facilities have been and continue to be a major influence on the region they require special attention.

The network of transportation facilities that serves the three county study area is potentially one of the best in the county. All modes of transportation are presently available in and around the area. Traditionally, the St. Louis metropolitan area, of which Madison, St. Clair and Monroe Counties are a part, has been a leading transportation center. The area's superiority in this field, however, has been threatened in recent years by the improved development of transportation facilities in other metropolitan areas coupled with the degeneration of systems and facilities in the St. Louis area. The central geographical location of this region indicates that the potential for improved transportation is good.

The existing system of major thoroughfares includes three interstate routes and several other federal, state, and county roads. This network provides for the movement of people and goods into and through the area, as well as providing a backbone for land use development. Both Madison and St. Clair Counties have good east-west access. Madison County also enjoys easy access to the north. Monroe County does not have the same degree of good access as Madison and St. Clair Counties since its major existing highways are two lane state routes instead of interstate facilities.

The part of the highway network which provides for general north-south movement through the three counties is presently inadequate. The routes which carry the bulk of the north-south traffic are narrow two lane facilities that wind their way through the cities of the study area. This fact points out the need for several by-pass routes and improvements of existing roads to fulfill the necessity of free flowing north-south traffic movement. Another deficiency of the highway and street network is the large number of at-grade rail crossings where train traffic comes in conflict with auto and truck movement. This causes major hindrances in highway traffic flow at several times during a typical day.

The existing railroad facilities make this area a major rail center for the nation. As in the past, the St. Louis metropolitan area is a hub of rail activity, with trains entering from the east, being regrouped into new trains and departing for the west and southwest. The area is served by several major line-haul railroads and two major local switching rail lines. However, inefficient design and operational characteristics of the older local switching facilities have led to somewhat of a decline in the importance of the region as a rail center. Several industries have indicated that they now make efforts to route trains around the area because it takes a relatively long time for a rail car to move through the local facilities. The operation of railroads in and through the three county area could potentially be affected by the rail reorganization activities of the federal government in the northeast United States. This could have an adverse effect on the rail service to the smaller cities and towns in the area. The fact that the present rail facilities occupy a large amount of land has led to several rail relocation strides which could change the future operation of the railroads. The success of these rail relocation plans are still in question at this time.

Water related facilities make up an important part of the existing transportation network. The Mississippi River connects the area to the Atlantic Ocean (through the Illinois River, the Great Lakes and the St. Lawrence Seaway) and directly to the Gulf of Mexico. Therefore, the potential for increased port development in this region is substantial. The Kaskaskia Canal adds to this potential by bringing river transportation to an area rich in grain and coal resources. There are several privately owned and operated port facilities within the Illinois side of the Mississippi River. This indicates a general need for more intensively developed multi-commodity port facilities open to public use if river transportation and related economic development activity is to increase.

There are several general aviation airports in the three counties which currently fill the need for general aviation in the area. The major airport that presently serves this area's needs for commercial air transportation is Lambert-St. Louis International Airport, located in St. Louis County. This airport currently provides domestic and international airline service, but is projected to become inadequate to satisfy increased traffic demands during the 1980's. Plans are underway toward development of a metropolitan airport at Waterloo-Columbia in Monroe County, which when approved and implemented, will strongly boost not only the metropolitan area's transportation assets but also related development aspects throughout the three county region. This major facility is also described and incorporated within the alternative planning process in latter sections of this report.

LAND USE PLAN FOR THE YEAR 2000

The land use plan is intended to guide the development of Madison, St. Clair and Monroe Counties in the most rational manner possible. In order to provide such guidance, the plan not only indicates the recommended best use of the land; but also establishes a common basis for various governmental functional units and agencies to determine and provide for the physical needs of the area's constituents. The land use plan described in this chapter is an existing trends plan. That is, the plan provides for the land use and transportation facilities required to serve the area's future population which was estimated on the basis of projecting existing known economic factors and employment trends. The plan does not provide for the physical requirements of a future population attributable or contingent upon the achievement of all desirable economic, social or physical goals.

The land use plan was prepared by determining the location, amount and type of land uses and supporting major thoroughfares required by approximately the year 2000. In making these determinations, population projections and allocations, existing land use, and current development proposals regarded as imminent were considered. However, the degree of detail of the considerations was kept to the regional and subregional levels rather than infringe upon the responsibilities and prerogatives of local units of government. Thus, the plan was not prepared to consider the uses of individual parcels or groups of parcels, nor were communities disaggregated into blocks or neighborhoods for detailed consideration. The plan in the role of coordinating future development was prepared to establish a desirable overall pattern or framework for the future growth and development of the three counties. Establishment of this framework will remain viable until such time that additional projects or developments of regionwide impact, but not incorporated within the plan, become reality through formal approval, initiation of construction, or operations. When these events occur, the plan as formulated will have to be updated and revised to incorporate such impacts accordingly.

The plan illustrates, graphically and statistically, a desirable land use configuration which will effectively accommodate the three county area's population as projected for the year 2000. Elements of the plan include general urban areas, major commercial centers or nodes, major industrial complexes, major park and recreation as well as open space and conservation areas, major public and semi-public areas, and major throughfares. These elements are discussed below.

Table 5.3
GENERAL URBAN REQUIREMENTS - 2000
MADISON, ST. CLAIR AND MONROE COUNTIES

Planning Area	2000	1970	Additional Population by 2000	Additional Acres of General Urban Required
Madison County:				
*PD #1	132,000	101,009	30,991	5,165
PD #2	93,500	76,248	17,252	2,875
PD #3	4,700	3,779	921	153
PD #4	103,850	49,885	53,965	8,994
PD #5	10,550	7,522	3,028	504
TOTAL	344,600	238,443	106,157	17,691
St. Clair County:				
PD #1	142,800	139,610	3,190	531
PD #2	153,000	96,344	56,656	9,442
PD #3	57,650	30,640	27,010	4,501
PD #4	9,600	5,674	3,926	654
PD #5	7,800	5,471	2,329	388
TOTAL	370,850	277,739	93,111	15,518
Monroe County:				
TOTAL	33,050	10,057	22,993	3,832
GRAND TOTAL	748,500	526,239	222,261	37,041

*Planning District

Source: Southwestern Illinois Metropolitan and Regional Planning Commission.

General Urban

Since general urban is the most dominant land use, it sets the overall pattern of development. The most notable aspect of the plan is that a more compact pattern of general urban development is emphasized. Future general urban development is directed toward suitable vacant areas within and immediately adjacent to the existing urbanized area (see Plate 12).

The amount and distribution of general urban land depicted on the plan are directly related to the population projections. A review of existing land use data in conjunction with population distributions revealed a wide range of varying densities. For the most part, however, the population was distributed at a density range of 4 to 8 persons per gross acre of general urban development. For the purpose of estimating future general urban requirements, it was assumed that future general urban would occur within this same range or at an average of one acre for every 6 persons of urban population. Within the urbanized westerly planning districts of the study area, projected future population increases by township were considered urban in nature, while in the non-urban planning districts of the study area, only the population increases projected for the free-standing communities were considered urban in nature. The specific locations of additional general urban land was guided by known or anticipated development trends of the study area's various communities or sub-areas as determined through a review of existing local comprehensive and regional functional plans. The amount of general urban land required by planning district in the year 2000 is presented on Table 5.3.

Commercial

Commercial centers depicted in the land use plan are intended to be easily accessible to residents of the surrounding urban area and region. To achieve this, the land use plan provides for the addition of several major commercial centers or nodes within the three county area (see Plate 12). These additions are based upon known development proposals such as Airport Plaza in Bethalto and West Park Center in Columbia, and anticipated intensification of commercial activities at existing commercial areas such as those near the beltline in Alton. The plan reflects a continuation of the existing trend of Fairview Heights becoming the dominant commercial center in the Illinois portion of the metropolitan area. With the exception of the Alton-Wood River portion of the study area, which is expected to be oriented more toward the regional commercial facilities of northern St. Louis County (such as Jamestown Mall), the Fairview Heights regional commercial center is well situated at the intersection of major highway facilities and is in proximity to the population and geographic center of the study area's urban development. The community commerical centers are distributed with respect to their comparatively smaller service areas and the distribution of the population within the three counties.

Table 5.4
SHORT-RANGE MAJOR HIGHWAY IMPROVEMENTS
5-YEAR PROGRAM

Route	From	To	Type of Improvement	Additional Lanes
FAP 951	Neidringhouse	Broadway Ave.	New Construction	4
FAP 155	Henry Street	Ill. Rte. 3	" "	4
Ill. 157	U.S. Rte. 50	Lake Drive	Major Reconstruction	2
Ill. 161	U.S. Rte. 50	Lincoln Trail	" "	2
Ill. 158	I-64	Ill. Rte. 161	" "	2
I-64	I-55	St. Clair County Line	New Construction	6
Maryville Road	Pontoon Rd.	Ill. Rte. 162	Major Reconstruction	2
Ill. 143	Ill. Rte. 159	Ill. Rte. 3	" "	2
U.S. 50	I-64	Cordon Lane	" "	2
Ill. 157	Schwarz Ave.	SIU East Entrance	" "	2
Ill. 111	Fosterburg Rd.	Annex Street	" "	2
U.S. 67	Clark Bridge	-	Bridge Work	-
I-255	Mississippi River	I-70	New Construction	4
FAP 410	I-55	Stolle Road	" "	4
FAP 409	I-64	Clinton County Line	" "	4

Table 5.5
LONG-RANGE MAJOR HIGHWAY IMPROVEMENTS
20-YEAR PLAN

Route	From	To	Type of Improvement	Additional Lanes
FAP 151	Neidringhouse	St. Clair County Line	New Construction	4
Ill. Rte. 140	Annex Street	Ill. Rte. 111	Major Reconstruction	2
Ill. Rte. 203	I-270	Pontoon Road	" "	2
By-Pass U.S. Rte. 50	Ill. Rte. 13	Ill. Rte. 161	" "	2
U.S. Rte. 50	Bunkum Road	Ill. Rte. 159	" "	2
Humbert Rd.	Ill. Rte. 111	Pearl St.	" "	2
Humbert St.	U.S. Rte. 67	Pearl St.	" "	2
Ill. Rte. 159	I-55	FAP 207	" "	2
Ill. Rte. 159	I-64	Ill. Rte. 161	" "	2
Ill. Rte. 159	I-64	Madison County Line	" "	2
FAP 413	Jersey County Line	I-55	New Construction	4
FAP 410	I-255	Cordon Line	" "	4
U.S. Rte. 460	I-55	I-255	" "	4

U.S. Rte. 460	Ill. Rte. 13	Freeburg	" "	4
U.S. Rte. 67	Ill. Rte. 3	Missouri Line	" "	4
FAP 207	Ill. Rte. 143	Ill. Rte. 157	" "	4
FAP 207 Spur.	FAP 207	Ill. Rte. 157	" "	4
Connector	Clark Bridge	FAP 413	" "	4
Great River Road	St. Clair Line	FAP 410	" "	4
FAP 132	Ill. Rte. 111	Ill. Rte. 3	" "	4
Ill. 140	Ill. Rte. 111	Ill. Rte. 159	Major Reconstruction	2
Union Street	U.S. Rte. 67	FAP 155	New Construction	4
Ill. 159 By-Pass	I-55	St. Clair County Line	" "	4
Outerbelt	I-55/70	I-255	" "	4

Industrial

The land use plan reflects the continuation of the American Bottoms as the major focal point of industrial development within the three county study area (see Plate 12). However, the plan also recognizes that a number of upland locations also have locational characteristics such as accessibility to transportation facilities and availability of utility systems. The amount of land designated for industrial use by the plan is not directly related to increased demands of the local economy's manufacturing sector - although such increases are anticipated. Rather, the plan sets aside, for use at some undeterminable future time, areas that are better suited for industrial use because of their site characteristics and locational advantages. The industrial areas shown on the plan consist of such areas identified by Illinois Metro-East Development Corporation and to a lesser extent, current development proposals such as the Civic Memorial Airport business and industrial park.

Public and Semi-Public

The plan as illustrated on Plate 12 incorporates the conversions of two existing major public and semi-public areas to other uses. As indicated above, portions of Civic Memorial Airport are proposed to be used for commercial and industrial facilities. The second area proposed for different use is a major segment of Alton State Hospital's property to be used for recreational use. The other public and semi-public areas shown on the plan are existing major public and semi-public uses.

Conservation/Recreation Areas

Considerable areas have been designated as conservation and recreation areas (see Plate 12). These areas are generally not well suited for intensive urban development because of steep slopes, wetness problems or other adverse physical characteristics. However, not all areas designated for recreational use have such limitations. These other areas were designated because of their unique historic or aesthetic characteristics such as Cahokia Mounds expansion and Rock House Springs. Areas designated for use in urban or regional parks have been located to correspond with population distributions and to provide for future park acreage requirements.

Transportation Facilities

The land use plan is based upon several assumptions about the future transportation network. It is anticipated that the projects included in Table 5.4, "Short Range Major Highway Improvements" and Table 5.5, "Long Range Major Highway Improvements", will be completed by the year 2000. The implementation of these improvements will result in a network of thoroughfares which includes proposals adopted as part of the 20 year metropolitan area transportation plan as well as the proposed Outerbelt which is still under study. The major parts of this network are highlighted on Plate 12. The most notable aspect is the greatly improved north-south access within the area.

VI. ALTERNATIVE CONSIDERATIONS

This study has been undertaken to coordinate the plans and projections of the various local and regional planning bodies in order to provide a uniform planning basis for the three-county Metro-East region. The projected growth and resulting land use plan presented in this study were first based upon a series of assumptions which reflect a consideration of the region's land potential for urban development, past socio-economic trends, adjusted State of Illinois employment and population projections, local and area-wide planning goals and policies, and the impacts certain well-defined development projects will have on the region's future population, economy and land use. In essence, the plan illustrates, both graphically and statistically, a desirable land use configuration which will effectively accommodate the existing and projected population of the region. Since the basic plan assumptions reflect the combined inputs of state, local and area-wide planning bodies, the plan provides a uniform basis by which to judge future local and regional needs; to prepare, review and update community and functional plans; and, to analyze and review applications for federal and state financial assistance to local units of government.

It should be recognized, however, that the plan does not consider the impacts of other possible development projects such as riverfront redevelopment, construction of a new St. Louis Metropolitan Airport in Illinois, development of gasification/liquefaction industries, railroad relocation, and construction of a rapid transit system to serve portions of Metro-East. The implementation of any one or all of these major development projects could result in significant alterations in expected future employment and population and proposed land use configurations.

Therefore, in order to provide a framework for possible future modifications to the plan, this chapter gives consideration to the potential impacts of these uncertain, but yet very possible, development projects. A conceptualization of the potential effects of these projects on the future development pattern of Metro-East is presented schematically in Plate 13.

POTENTIAL DEVELOPMENT PROJECTS

The following sections describe the potential development projects considered in this study and discuss, in general terms, the range of impacts which might realistically be expected from the implementation of each project.

Kaskaskia River Development

The impending completion of the Kaskaskia River Canalization Project sets the stage for development of facilities along the river to realize the potential of river transportation in the eastern sections of St. Clair and Monroe Counties. The potential for development of quality industrial facilities that will use the river is great. It is anticipated that the river presents three major development potentials: grain shipping, coal transportation and creation of industrial parks adjacent to the canal. A fourth potential, conservation of wildlife areas, may be added to these.

The location of the Kaskaskia River in south central Illinois near major grain producing areas makes the probability of the development of grain loading operations good. The grain can be brought by truck to elevators on the river for sale and/or storage. Loading operations which would transfer the grain to barges can be developed on docks built adjacent to the elevators. The river provides a means of moving the grain to the Mississippi River system for distribution to processing plants, livestock feeding areas and sea ports for export.

Even greater potential exists for the movement of coal on the river. The huge coal reserves of southern Illinois present a readily available source of the fuel which can be moved by trains to dock facilities on the river. From there the river provides inexpensive transportation to major coal markets. The potential for the Kaskaskia to play a role in future coal gasification/liquefaction operations also exists, since the river provides a link between the coal fields and the major water resources of the Mississippi River. It has been estimated that one coal shipping project could generate a total of 10,000 tons of coal per day on the river by itself.

Potential sites for industrial parks exist along the river and could be developed to accommodate manufacturing operations which could use rail, truck, or river transportation. There would appear to be an available labor supply to accommodate such operations in the area. The natural setting also creates the potential for well-designed industrial parks which could blend in well with the surrounding land.

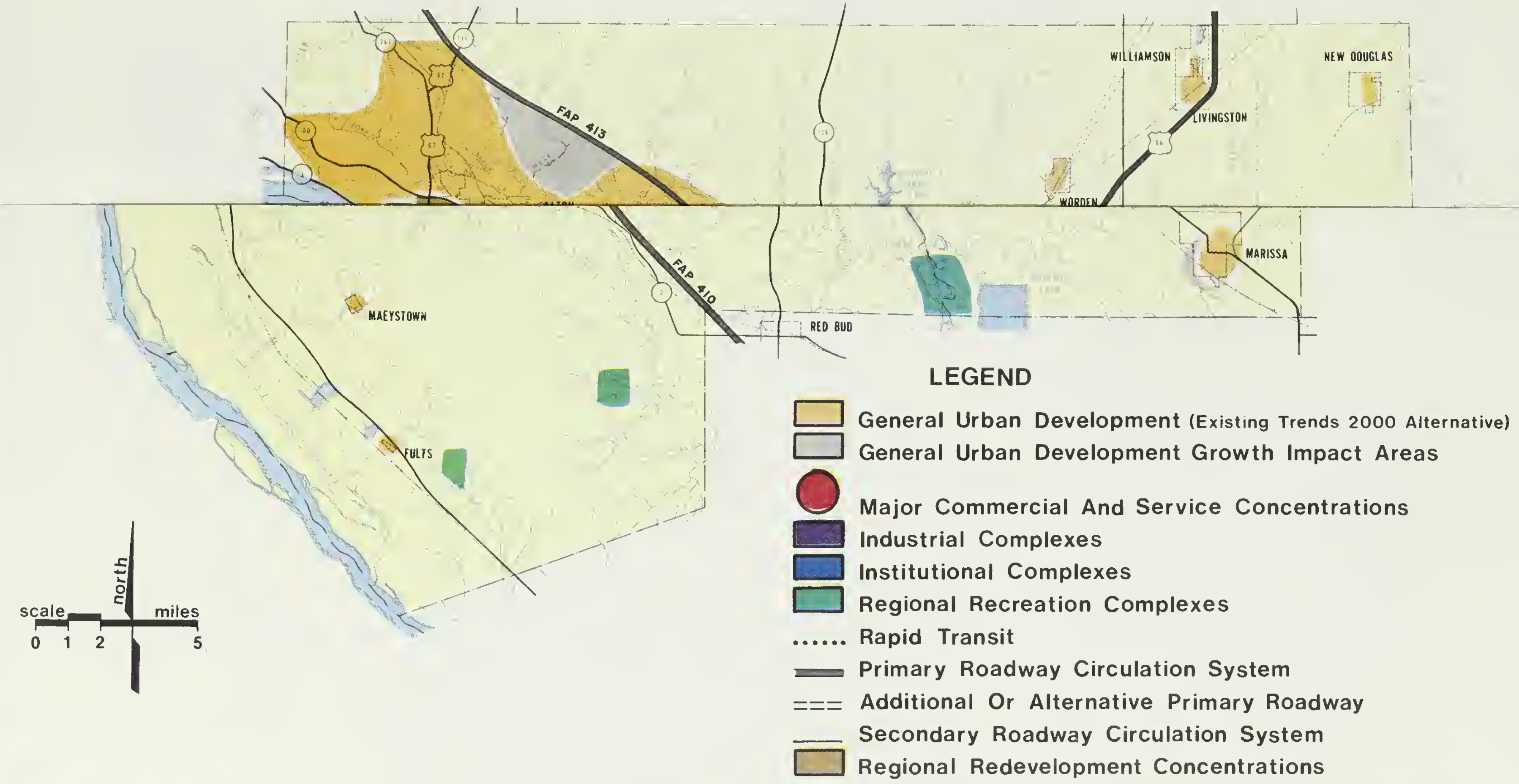
The potential for conservation of wildlife areas and natural lands exists along the river principally because the State of Illinois owns several thousand acres of wooded wildlife habitat adjacent to the canalization project. Some of this land represents a potential resource for industrial development. However, it is also a valuable open space and conservation resource for this region in its natural state. Development of industrial parks and dock facilities can be accomplished in conjunction with conservation of large portions of this public land.

The Kaskaskia River and its development potential presents a unique resource for this region. It can provide a boost for the economy by facilitating export of raw materials and generating industrialization which would provide major employment opportunities. It also can provide a tremendously valuable natural recreation and conservation area if substantial amounts of the

ALTERNATIVE GROWTH PATTERN

Regional Development Impact Maximization

MADISON, ST. CLAIR AND MONROE COUNTIES, IN ILLINOIS



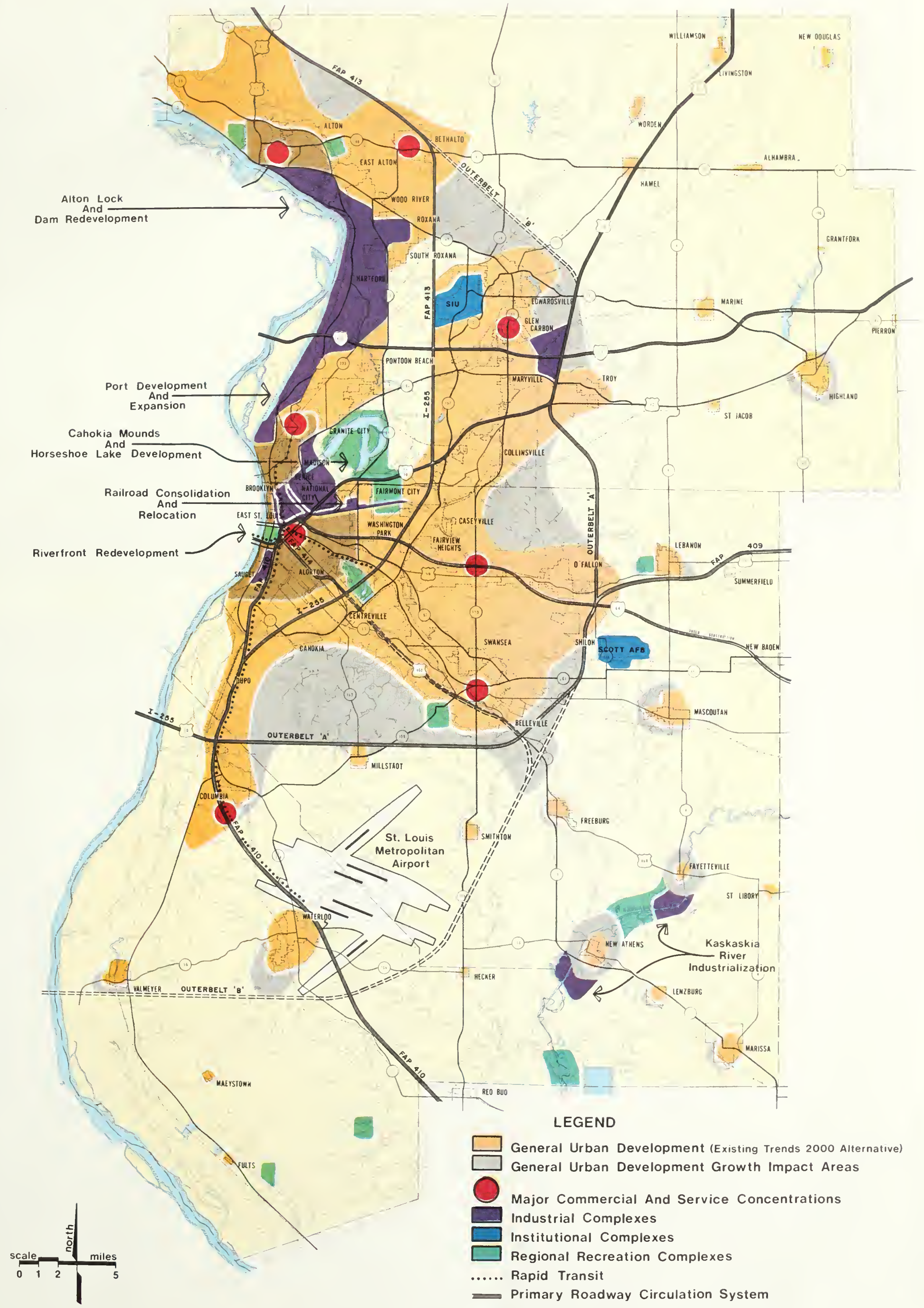
LEGEND

- 🟧 General Urban Development (Existing Trends 2000 Alternative)
- ⬜ General Urban Development Growth Impact Areas
- ● Major Commercial And Service Concentrations
- 🟪 Industrial Complexes
- 🟦 Institutional Complexes
- 🟩 Regional Recreation Complexes
- ...... Rapid Transit
- ▬ Primary Roadway Circulation System
- === Additional Or Alternative Primary Roadway
- — Secondary Roadway Circulation System
- 🟫 Regional Redevelopment Concentrations

SOUTHWESTERN ILLINOIS METROPOLITAN AND REGIONAL PLANNING COMMISSION

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUG A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT UNDER A CONTRACT WITH THE ILLINOIS DEPARTMENT OF LOCAL GOVERNMENT AFFAIRS.

ALTERNATIVE GROWTH PATTERN
Regional Development Impact Maximization
MADISON, ST. CLAIR AND MONROE COUNTIES, IN ILLINOIS



LEGEND

- 🟧 General Urban Development (Existing Trends 2000 Alternative)
- ⬜ General Urban Development Growth Impact Areas
- 🔴 Major Commercial And Service Concentrations
- 🟪 Industrial Complexes
- 🟦 Institutional Complexes
- 🟩 Regional Recreation Complexes
- ...... Rapid Transit
- ▬ Primary Roadway Circulation System
- === Additional Or Alternative Primary Roadway
- — Secondary Roadway Circulation System
- 🟫 Regional Redevelopment Concentrations

SOUTHWESTERN ILLINOIS METROPOLITAN AND REGIONAL PLANNING COMMISSION

THE PREPARATION OF THIS MAP WAS FINANCED IN PART THROUG A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT UNDER A CONTRACT WITH THE ILLINOIS DEPARTMENT OF LOCAL GOVERNMENT AFFAIRS

present public lands are conserved. The concepts presented in Plate 14 indicate the potentials discussed above.

Airport Development

The construction of a new metropolitan airport at the Columbia/Waterloo site will provide an economic impetus for both the three-county area and the St. Louis region as a whole. Based on analyses developed by Economic Research Association (ERA) for the St. Louis Metropolitan Area Airport Authority, the construction of the regional airport at Columbia/Waterloo is projected to generate approximately 6,700 jobs by the year 1980 and an additional 6,800 by 1990. These direct airport-associated jobs, including airline personnel, freight-forwarding personnel, and other fixed personnel, will be further supported by additional employment in industries and services which will be attracted to the general location of the airport. Average annual direct and indirect employment generated by the airport is projected by ERA to be 32,924 during the 1980-1990 decade.

The economic impact of the airport operation can also be examined in terms of its effects on selected areas. It is expected that the Columbia/Waterloo airport will contribute to the redevelopment potential of both St. Louis and East St. Louis in that the proposed site will contribute to a balance of regional economic growth. Because the airport is a large employment and service center, it would significantly influence regional growth patterns. It is likely that major urban development will be generated in the area between the proposed airport and existing urbanization. There is the potential for increased commercial activity to serve the needs of both the transient airport user and the permanent residents attracted by employment at the airport. Development of industrial parks and freight operations is also possible on the land adjacent to and near the airport site.

Highway Network

The alternative growth pattern map presented in Plate 13 illustrates the same network of freeways and major arterials as is included in the existing trends plan map (Plate 12), with three exceptions. First, Illinois Route 111 is elevated to a major arterial on the alternative pattern map because it is anticipated that increased development in the Alton-Wood River area and the development of Horseshoe Lake State Park will generate a higher traffic flow along this corridor. Second, an additional freeway called "Outerbelt B" has been added. The northern section of this freeway would run from FAP 413 near Bethalto to Interstate 55 northeast of Edwardsville. The southern portion of the route would go from "Outerbelt A" south of Belleville past the southeastern edge of the proposed new St. Louis Metropolitan Airport to a new Mississippi River bridge near Valmeyer in Monroe County. This facility would provide a more effective southerly bypass of the St. Louis urban area by connecting with Interstate 55 in Missouri. It would also provide increased access to the airport from the development expected in central Madison and St. Clair Counties. The third change shown is an upgrading of U.S. Route 460 to a freeway from Interstate 255 to the proposed "Outerbelt B."

Port Development

The development of efficient port facilities in the three-county area is necessary to sustain the inbound and outbound flow of dry bulk, liquid bulk, and general cargo commodities through the St. Louis area. The increases in commodity flows projected by A.T. Kearney and Associates, which are included in a report commissioned by the Maritime Administration, indicate that the tonnage handled through the St. Louis port will increase by 186 percent from 18,721,000 tons in 1969 to 53,635,000 tons in the year 2000. Although the increase will in large part be accommodated by single industry, private port users, a large segment will also be served by expanded and improved public port facilities. Particularly in the area of bulk commodities, which constitute the greatest part of existing and projected flows, public port facilities will provide a much required service.

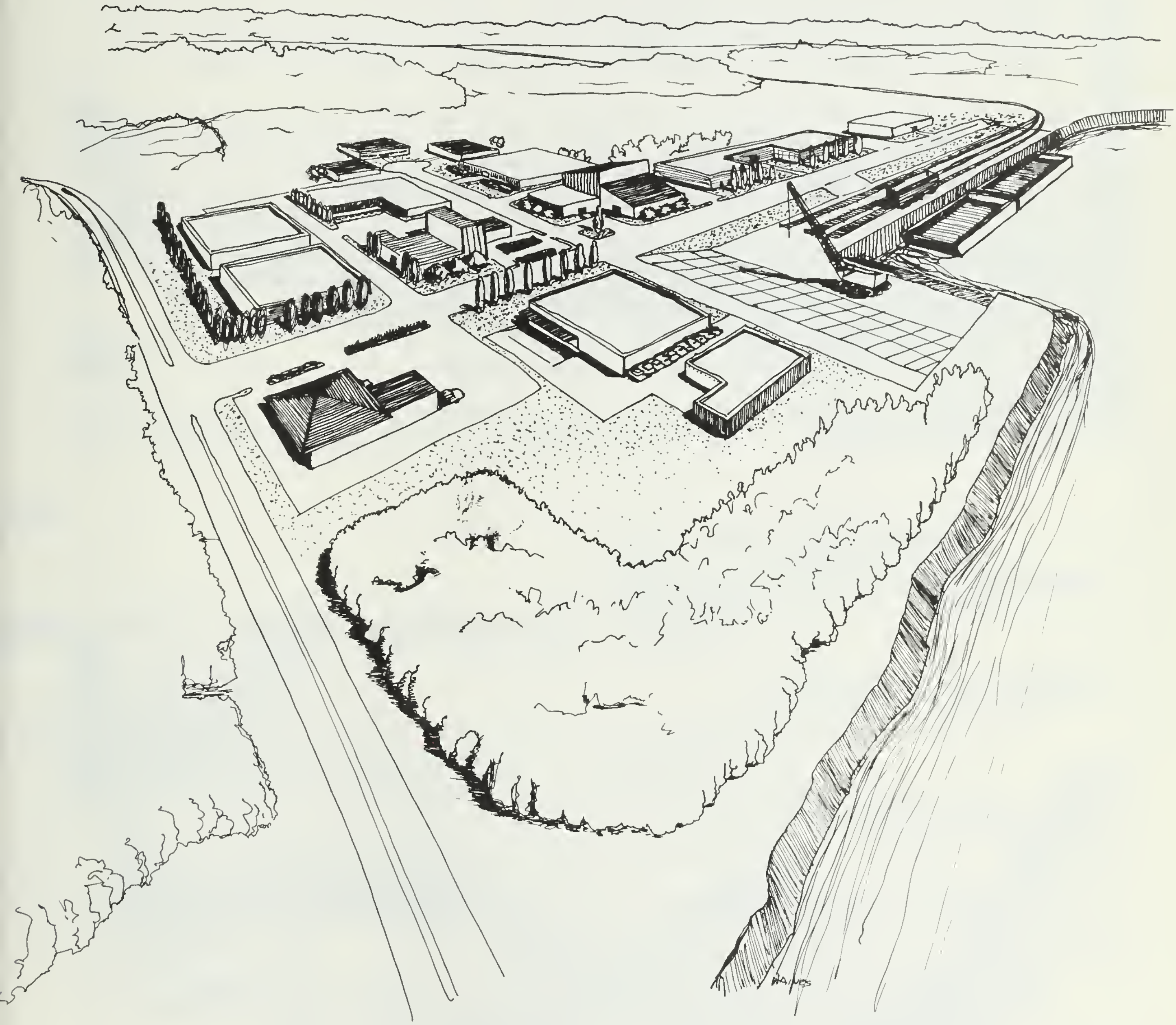
In addition to the transport services contributed by expanded ports, their role will also include the stimulation of increased industrial development. The substantial amount of vacant land adjacent to potential areas for port expansion will provide good industrial park sites with readily available transportation facilities. The potential for development of a multi-modal port facility, which would facilitate transfer of shipments between transportation modes, in this region adds to the desirability of these industrial sites. Plate 15 presents a conceptual sketch of such a port facility.

Horseshoe Lake-Cahokia Mounds Complex

This region is fortunate in having two large recreation and education resources in the middle of its urbanized area. The Cahokia Mounds and Horseshoe Lake State Parks provide the area with a unique opportunity for both recreational and educational experiences at facilities close to the urban centers. Cahokia Mounds State Park is one of the most important archaeological sites in the United States and the studies there of prehistoric mound-building Indians have received world-wide attention. It contains the largest man-made structure (Monk's Mound) north of the Rio Grande River. The existing State Park covers the center of the largest prehistoric city north of Mexico. This city originally spread over some 3,700 acres, contained more than 100 mounds, and was enclosed by a monumental palisade wall. Its temples, plazas, compounds, giant sun calendar, industrial and residential quarters are gradually being uncovered by excavation. This work has led to a partial understanding of how Cahokia exerted a civilizing infuence on the eastern half of the United States between 900 A.D. and 1300 A.D., sending out trade and ideas to Texas, Florida, Ohio and Minnesota.

plate 14

Kaskaskia Development Concept



Horseshoe Lake State Park, which is in the early stages of development, offers the potential for many types of outdoor recreation including swimming, sailing, canoeing, picnicking, camping and fishing. The lake contains approximately 1,400 acres of water and is one of the largest natural lakes in Illinois. It is also anticipated that the lake will be part of the region's overall flood control and drainage system. Therefore, it is possible that the lake will be dredged to increase its value as a storm water retention area. This could also increase the recreational value of the lake.

The development of these two state parks will increase the desirability of this region as a place to live. They could also generate an increase in tourism, thereby increasing employment opportunities and vitality to this sector of the region's economic structure. It is anticipated that Cahokia Mounds State Park will be developed as an educational center, while Horseshoe Lake State Park will be a major regional park in the middle of an urban area. Plate 16 contains two conceptual sketches depicting museum development at Cahokia Mounds and marina development at Horseshoe Lake.

Railroad Relocation and Riverfront Redevelopment

The relocation of the massive rail yards located in the urban areas of Madison and St. Clair Counties has been the subject of study and discussion for many

plate

Port Development Concep

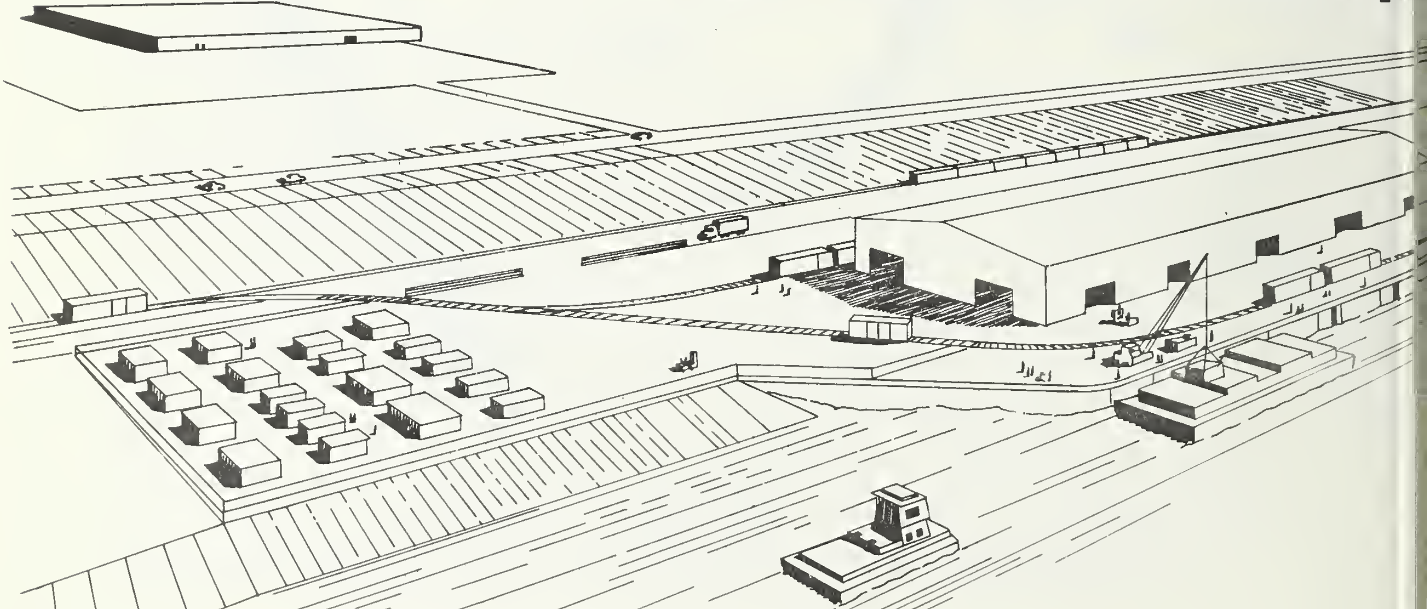
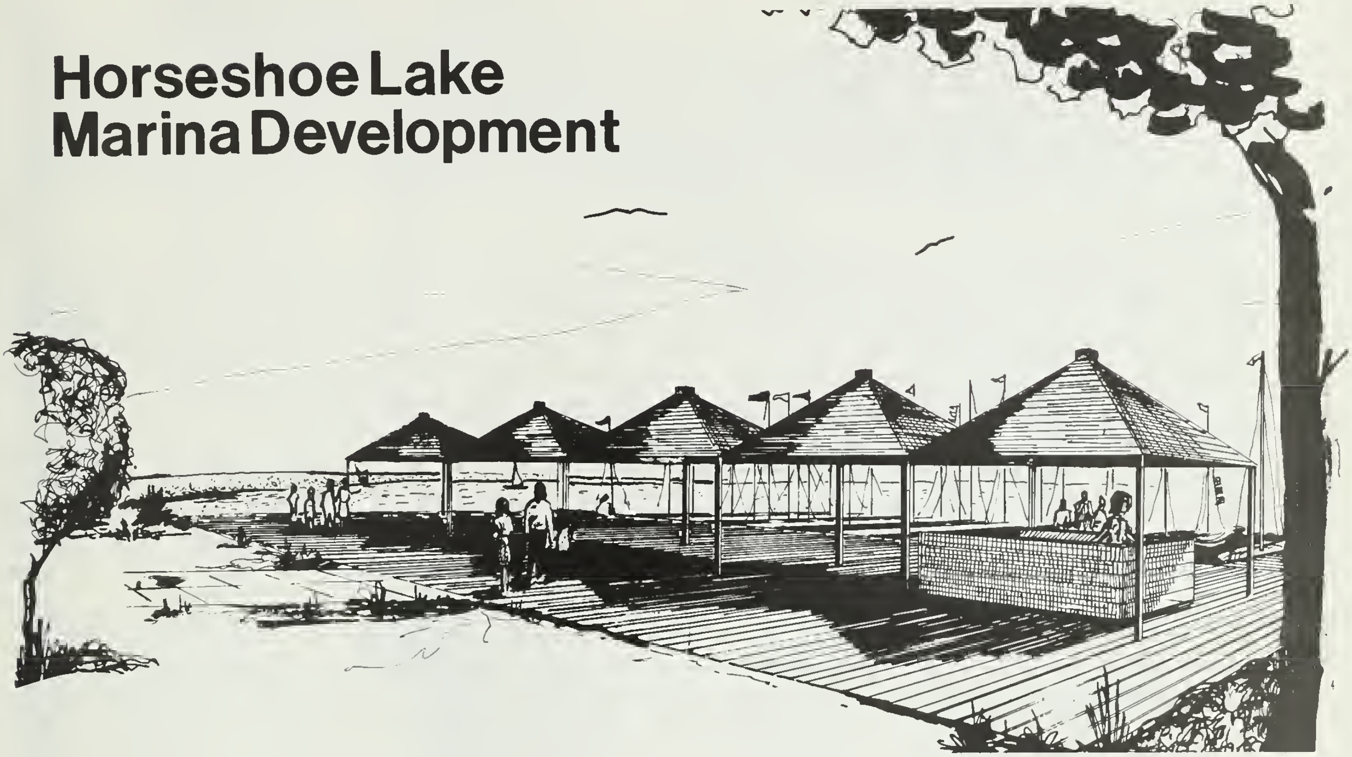


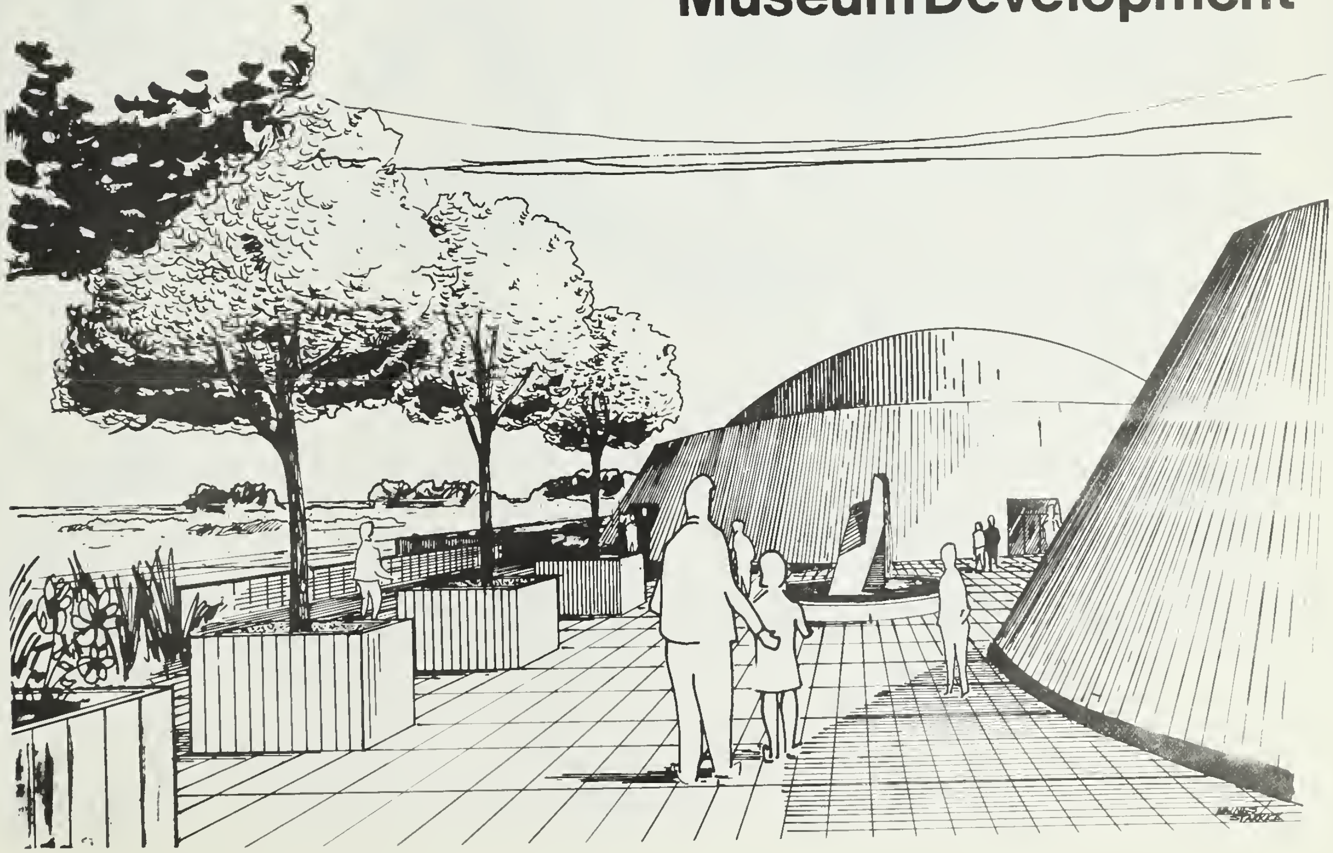
plate 16

RECREATION–EDUCATION COMPLEX

Horseshoe Lake Marina Development



Cahokia Mounds Museum Development



years. A comprehensive study of area-wide railroad consolidation and relocation has recently been completed under the auspices of the East-West Gateway Coordinating Council. This study presents several alternative solutions to the problem of making the railroad operations more efficient and lessening the constraint on development imposed on the area by the present rail facilities.

Railroad Relocation Alternative II, shown in Plate 17, presents the greatest potential for changing the urban configuration. This alternative would move the majority of rail yard operations to a new "Master Yard" and remove the present yards from the riverfront and south East St. Louis. Hundreds of acres would be freed from rail yard use and potentially made available for redevelopment. The riverfront property could be converted to several other land uses, including urban recreation and cultural uses, high-density residential uses, office uses, port facilities, or industrial parks. The approximate 300 acres in south East St. Louis that would also be freed by this alternative would have similar potential for redevelopment.

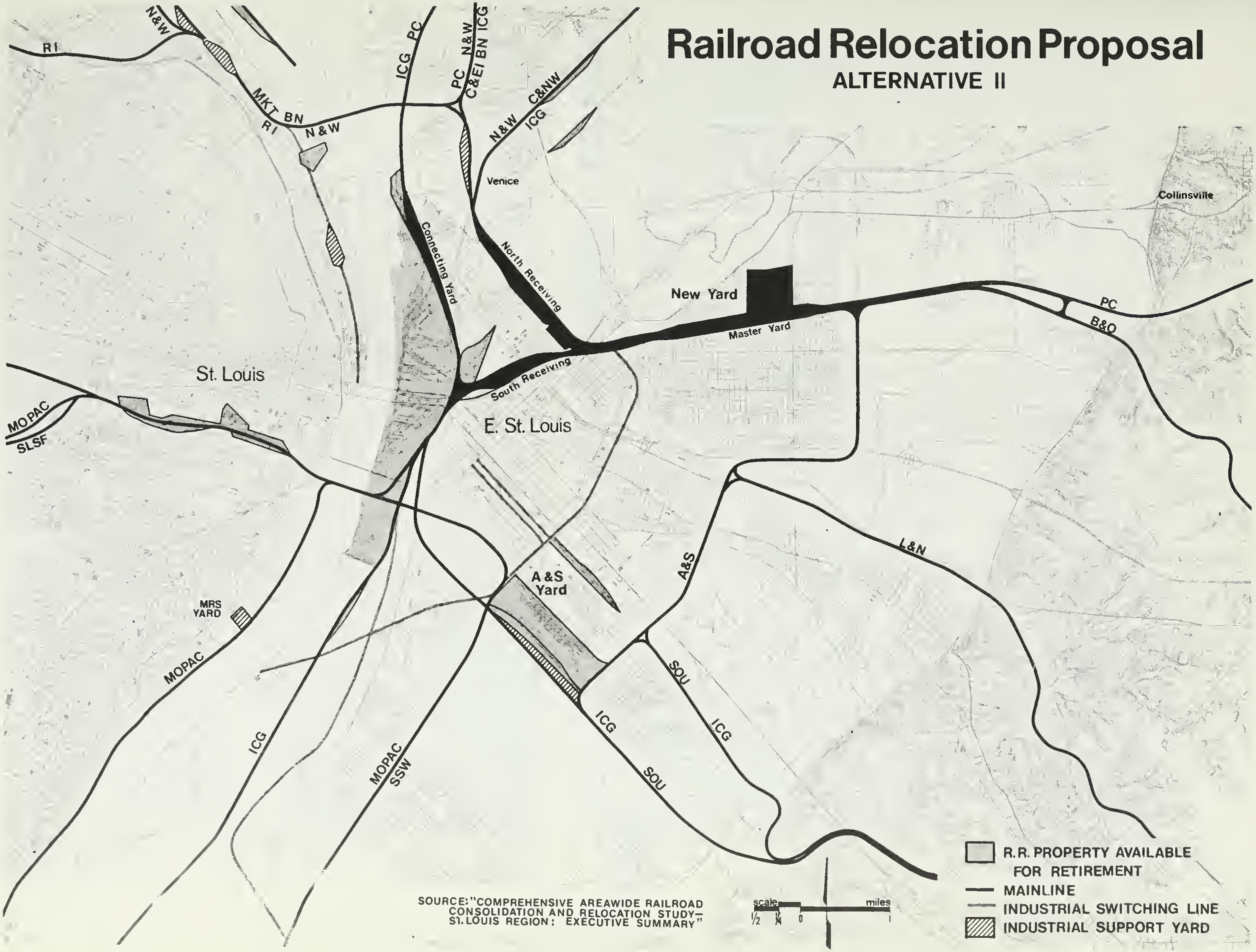
The major proposal in regard to riverfront development involves the creation of a national park on approximately 55 acres of the East St. Louis riverfront. The proposed park would complement the development on the St. Louis side of the Mississippi River. (A conceptual sketch of such a project is shown in Plate 18.) At the present time, a plan for development of this park is before the National Park Service for final review and approval. The plan under consideration places emphasis on landscaping and open space within the park complemented by commercial, office and public buildings conducive to a riverfront setting on adjacent land. The park itself could include lakes and picnic areas along with a public amphitheater. A museum or cultural center could also fit in on the riverfront with the proposed park. It has been estimated that up to 290 acres could be available on the riverfront for redevelopment if railroad relocation is implemented.

The Alternative II to railroad relocation would also eliminate the need for most of the movement of trains through urban neighborhoods, thereby lowering the impact of rail transportation on existing and future land use development. It is pointed out in the relocation study that construction and operation of the new "Master Yard" could have a negative impact on the adjacent area. Several houses and businesses would have to be relocated. The noise and visual pollution associated with the new yard would have to be dealt with as they occurred. The incidence of air pollution would be lessened if Alternative II is chosen and implemented.

In general, the alternatives contained in the railroad relocation study are designed to improve the reliability of rail transportation in the St. Louis area and to lessen the transit time of cars moving through the area. If these goals are met, the improved rail facilities could increase the attractiveness of the three-county area as a site for industrial development. The land adjacent to the new yards would have increased industrial potential.

Railroad Relocation Proposal

ALTERNATIVE II



SOURCE: "COMPREHENSIVE AREAWIDE RAILROAD CONSOLIDATION AND RELOCATION STUDY– ST. LOUIS REGION: EXECUTIVE SUMMARY"

Alton Lock and Dam No. 26

The existing Alton Lock and Dam No. 26 has reached capacity and is now being considered for replacement.[1] The proposed new facility would be located approximately 2 miles downstream from the present structure, and would contain two 1,200-foot locks located close to the Illinois side of the river. This new structure would eliminate the bottleneck in river traffic caused by the inadequacy of the existing facility, and would be designed to permit future expansion when needed. Plans also include construction of a separate small lock for pleasure craft as well as an assortment of recreation facilities such as picnic grounds, boat launches, a visitor center, and natural areas.

The construction of the new locks and dam would have significant economic impacts for both the nation and the St. Louis region. Nationally, the project would allow the Mississippi Riverway System to keep pace with increasing national economic trends (such as the continued agricultural development of the Midwest) which will require increased low-cost water-borne transportation. The project would also permit continuation of the inland waterway system as an important and competitive mode of transport which in the past has been instrumental in holding down transportation costs. This in turn would contribute to the continued growth of the inland marine industry which employed approximately 80,000 persons in 1972. Additionally, there would be a substantial cost savings to shippers due to elimination of towboat delay and lockage holdups. In general, the new locks and dam would strengthen the economies of the many cities and counties along the Mississippi which are largely economically dependent upon the river.

There would be significant regional impacts resulting from the construction of the new facility. The construction project, which is to cost $382 million and last for 11 years, is estimated to employ an average of 350 men per year with the total annual payroll amounting to $6.3 million (1972 dollars). In addition, a large portion of the construction materials, such as steel and cement, can be expected to be purchased from within the St. Louis region.

Operation of the new facility would also have a significant regional impact in terms of employment and location of industries. It has been estimated that by the year 2030, employment in water transportation industries and manufacturing firms using water transportation would increase to 128,100, more than twice what is expected in these industries if the facility is not constructed. This projected increase in employment would provide the economic support for an additional 344,000 persons, many of which could be expected to locate in Illinois due to the relatively large amount of existing and projected developable land. The new facility would also provide impetus for new and expanded industrial and port development. On the Illinois side, the area expected to experience the greatest industrial impact would be in the vicinity of the new locks and dam where industrial and port development could be expected to intensify as shown in Plate 13.

---

[1] Discussion based on a report prepared by Harland Bartholomew and Associates for the U.S. Army Corps of Engineers, St. Louis District, Environmental Study: Locks and Dam No. 26 (Replacement), April, 1974.

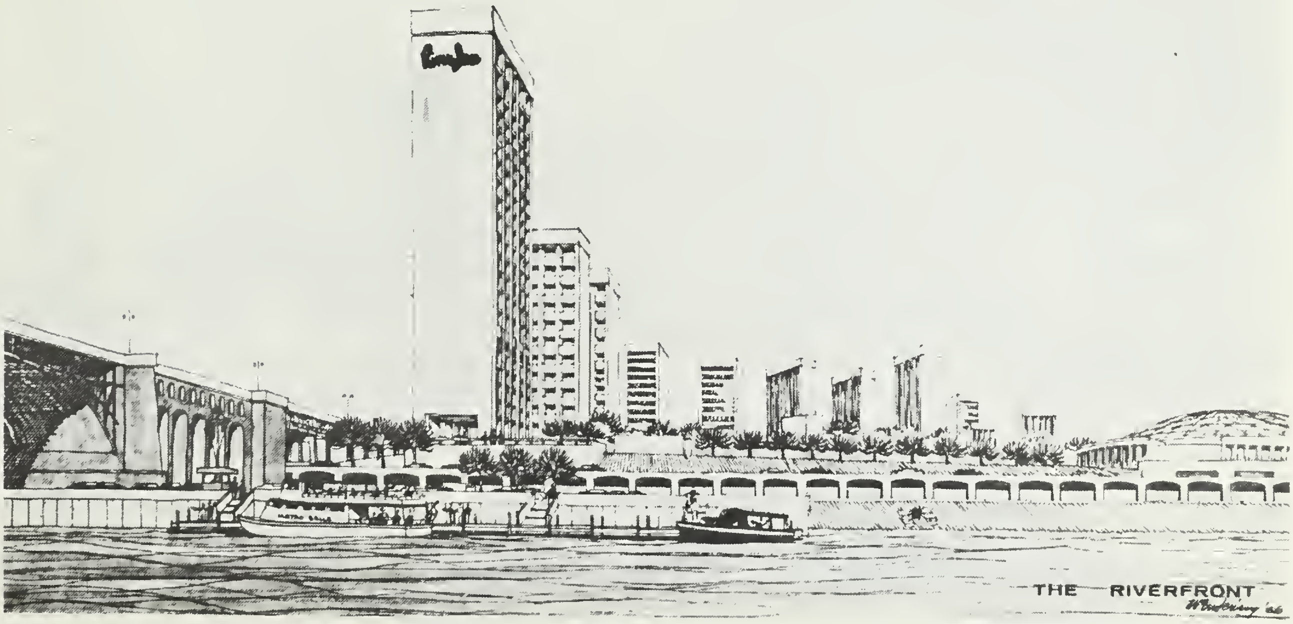
Mass Transit

Several proposals for improved mass transit in the St. Louis area are still under study at this time. The East-West Gateway Coordinating Council is further evaluating the relative merits of an improved bus system, a fixed-rail rapid transit system and a combination of both. The urban development pattern in the three Illinois counties could be significantly altered by the implementation of transit improvements. An improved bus system (with express service, exclusive bus lanes on the highway network, or demand-activated buses) could help alleviate congestion in the urban areas. Such a system, however, would probably not alter the trend toward low-density urbanization because bus routes are flexible enough to change and expand in reaction to new development.

A fixed-rail rapid transit system, as shown on Plate 13, would probably result in a different effect. Since a fixed rail system is a permanent capital

plate **18**

Riverfront Redevelopment Concept



improvement of significant magnitude, it is not likely that lines would be created to meet the needs of low-density areas. It is also likely that low-density urbanization would not be able to support such a system. Implementation of this type of transit system could generate higher density redevelopment of the older urban areas along the rail corridors. This would alter the present urbanization trend substantially, resulting in higher density residential developments near commercial and employment centers or adjacent to rail lines which would supply easy access to these centers.

The development of the concept of park-and-ride parking facilities in conjunction with either a fixed-rail or expanded bus system could have an impact on the area. The use of parking areas on the periphery of the urban area would help improve the quality of the air in the region and the transportation experience itself. Congestion would be decreased making the environment better and commuting easier. The system of interstate highways in this region offers the potential for the development of park-and-ride facilities near interchanges with bus transit even if a fixed-rail system is found to be unfeasible.

Core Redevelopment

A substantial portion of the urban area of the three-county region can be characterized as mature core areas. These urban centers are the older, established sections of some of the region's cities which typically have old commercial or office buildings, industrial sites which are either obsolete or on the decline, and residential areas which are in a state of disrepair or abandoned. These centers have lost much of their population and some of their importance over the past decade. The availability of relatively inexpensive, open land on the urban fringe has drawn residents and investors away from core areas. Economic conditions have declined in several of these centers to a point where it has become difficult or impossible to attract new residents or businesses. The general locations of these core areas are shown on Plate 13 as regional redevelopment concentrations.

The civic leaders and officials of the cities which contain these core areas are striving to promote redevelopment to enhance and in some cases revive their communities. There is reason to believe that some of their redevelopment proposals can be achieved and have a desirable effect on the region. Several of the other impacts described earlier in this chapter could contribute to the success of redevelopment activities. The future development of ports near the core areas could stimulate industrial development and in turn employment opportunities. Railroad relocation can contribute by freeing land for reuse. The Alton Lock and Dam No. 26 could generate increased river traffic and business opportunities for the Alton area. It also would provide a large recreation area in the front yard of those living in the older sections of the city. Mass transit in the form of fixed-rail rapid transit could spawn redevelopment along the transit corridors. The concept of this type of redevelopment is depicted in Plate 19.

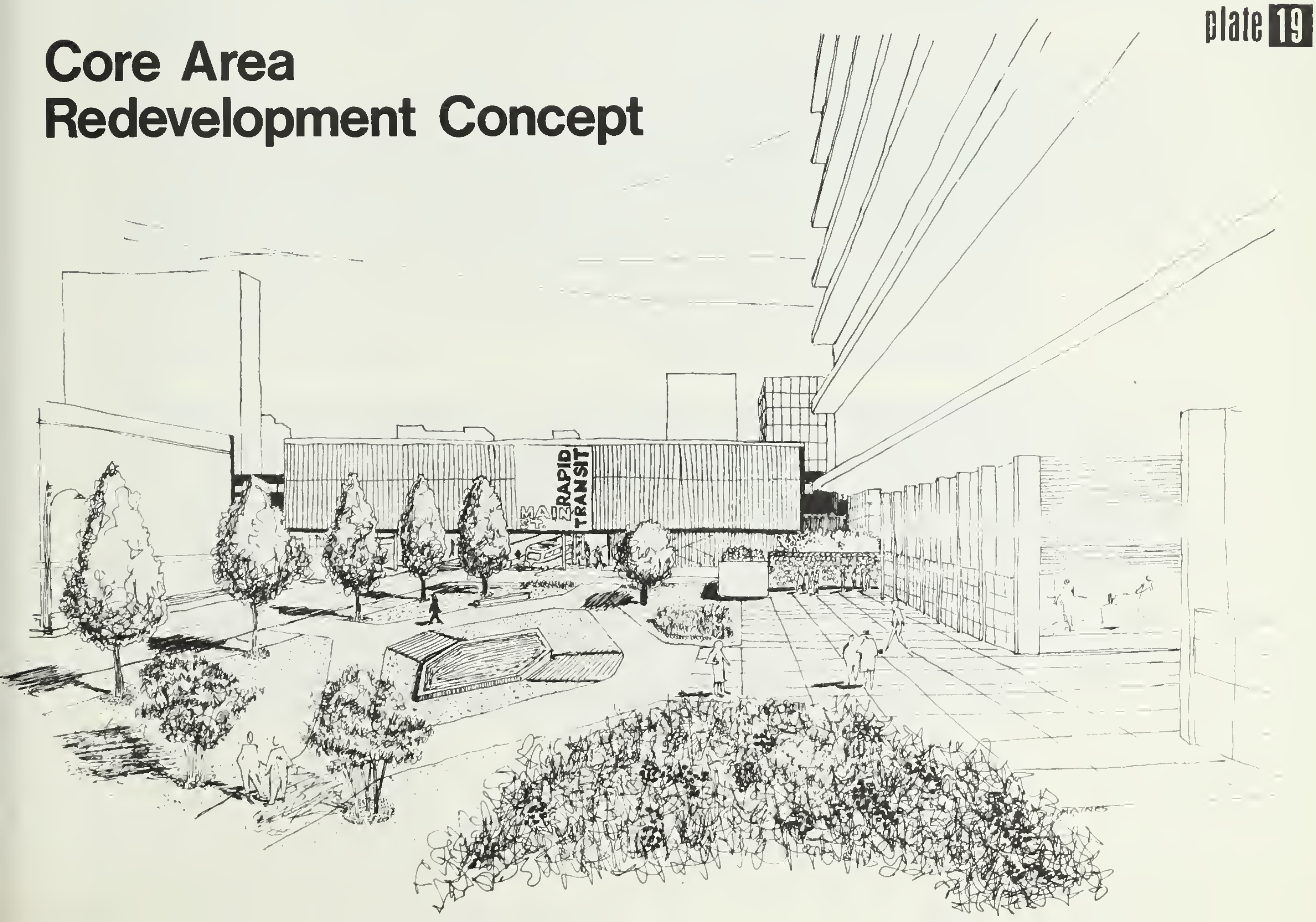
There is a potential for reuse of the core areas for several types of land use. Commercial uses can be generated by the development of high-density residential uses. Office and in-town light industrial centers can provide employment opportunities for the core area residents. This concept of redevelopment should become more feasible and probable as the price of raw, open land increases over time. Redevelopment will become more of an economic equal with development of the urban fringe. A carefully designed set of policies pertaining to taxation, utility facilities and public capital improvements could contribute to this process.

Coal Gasification/Liquefaction

One of the greatest single potentials for increased industrial and economic development in Southern Illinois is coal gasification and liquefaction. "Project Independence," proclaimed as a national program to establish independence from foreign energy suppliers by 1980, gave great impetus to coal resource research and development. Both Congress and the Administration have indicated that increased utilization of coal is an essential part of attaining energy selfsufficiency. The State of Illinois has also given this subject priority consideration and has earmarked significant revenues to stimulate research and subsequent development activities. The concept of converting

plate 19

Core Area Redevelopment Concept



coal to liquid and gaseous fuels would ultimately result in the creation of a whole new synthetic fuels industry which could provide other industries, institutions and domestic consumers with low-cost, readily available resources.

Illinois has the Nation's largest known reserves of bituminous coal, and presently provides the country with 10 percent of its consumption. A major portion of this supply and production is located within, and adjacent to, the three-county area and thus the area should be expected to play a major role in a shift to a coal-based energy economy.

The area could participate in and benefit from the development of coal resources for the production of synthetic fuels in several ways. The Institute of Gas Technology has suggested the following projects for the State of Illinois be undertaken:

(1) Low-Btu Gasification. Establishment of a large-scale low-Btu gasification project in Illinois appears to be the easiest to accomplish and should produce benefits to the State in the shortest time. The IGT developed U-GAS technology is the most advanced of competing new technologies, and an Illinois site and two-thirds Federal funding have already been offered. The relatively modest cost of the project ($39 million over two and one-half years) should make it possible to meet the one-third non-Federal fund requirements from sources within the State (both the State government and industry) and assure that this project goes forth in Illinois.

(2) High-Btu Gasification. Establishment of a large-scale high-Btu gasification project is certainly as important to the State as a low-Btu gasification project and should receive high priority. It will be a more difficult project to organize, however, because of the much larger capital commitments required and the strong competition from other states. The State should work in cooperation with the already established Illinois Utility-Coal Gasification Group since a natural gas system partner is essential.

(3) Liquefaction and Coproduct Plants. Although we believe that it would take much longer to achieve beneficial impact on the energy supply problem and that the institutional and economic obstacles are greater, Illinois should encourage establishment of at least one of the large-scale liquefaction or coproduct plant projects in the State. It is not easy here to single out the best opportunity. Rather, a major oil company with Illinois coal interests should be sought as a partner with the State. The Office of Coal Research is currently entertaining proposals for projects of this type from any of the major oil companies. We believe that

non-Federal financing offered will play as important a role as the choice of technology in deciding which projects receive Federal support.

(4) Coal-Related Research and Development. The ability of Illinois to attract large-scale government-supported programs and to rapidly develop a synthetic fuels industry with the related major expansion of the coal mining industry will be greatly enhanced by strong technical capabilities within the State. The State government should help build up the already established coal research and development capabilities at the various Illinois institutions, both through direct support of projects on problems specific to Illinois coal and through encouragement of increased Federal support of research and development projects at these institutions.

In each of the four recommendations of IGT, the three-county area can benefit directly and further contribute to the economy of the state as a whole. The availability of high-Btu gas in the area would be a major asset to existing industries and would undoubtedly act as an attraction to new industries. Low-Btu gas, the most readily available option open to development, would provide electric utility companies with a clean, relatively low-cost source of fuel. Liquefaction, though necessarily viewed in the long term, offers a considerable opportunity for the development of a singular synthetic fuels industry.

Each of the options available will have a great impact on the economy of the area: in the construction phase, an estimated expenditure of $700 million for a commercial scale gasification plant would be a great asset to the construction industry; during operation both coal development and plant operation would employ a considerable portion of the area labor force; finally, the benefits of low-cost, clean energy would be a tremendous asset to industries.

Conservation Proposals

Two major opportunities for the creation of conservation areas exist in this area. One is the land along the banks of Silver Creek in Madison and St. Clair Counties. This area contains one of the last major stands of trees in this region and is the habitat for many species of wildlife. The other area of opportunity, as mentioned before, is the several thousand acres of State-owned land along the Kaskaskia River in St. Clair and Monroe Counties. This resource could become a major conservation/recreation area if it is managed in a conscientious manner. If these two conservation areas were added to the 500-acre Fults Hill Nature Preserve in Monroe County, this region would have a unique and valuable open space resource that would enhance the lives of the present and future residents.

SUMMARY AND CONCLUSIONS

The projected future development following existing trends within Madison, St. Clair and Monroe Counties, as illustrated in Plate 12, could be significantly altered by the implementation of a number of development projects. These projects include the Kaskaskia River Canalization, a new East Side St. Louis Metropolitan Airport, additional major highway improvements, expanded port development, the new Alton Locks and Dam construction, railroad relocation and riverfront development, core redevelopment, rapid transit construction, coal liquefaction/gasification, and a number of major recreational developments. Each of these projects has been addressed in this chapter with special consideration given to their possible effects on the region's future development pattern.

The potential effects on land development could be far-reaching. As is apparent in Plate 13, significant changes in the character and distribution of future land use occur. In addition to the direct changes in land use resulting from the implementation of these projects, a considerable amount of additional land would, by necessity, become developed in order to accommodate the additional populations which would be generated. Most additional growth could be expected to occur along the periphery of the projected 2000 urbanized area. The most notable of these would be in northern Monroe and southwestern St. Clair County, due principally to the airport, the Kaskaskia Canalization, and improved highway facilities.

The analysis and recommendations presented in this report's preceding sections were undertaken to illustrate what might most reasonably be expected to occur, and what is recommended as being most desirable or appropriate to occur, in terms of physical and economic development throughout Madison, St. Clair and Monroe Counties between now and the year 2000. The first plan alternative documents the recommended growth and change location, magnitude, and pattern which would result through an extension of existing trends and an incorporation of previously established goals, objectives, development policies, and other normative considerations. The second alternative, in conceptual form, illustrates the extent to which existing trends and patterns might be enhanced and expanded upon if significant programs and projects of regional impact are maximized when ultimately approved and implemented.

The residents and government officials throughout the three-county area will have a direct influence in determining which of the development alternatives and which of the regional impacts to be maximized are emphasized in the future. The quantity and quality of growth and change throughout the region will determine the desirability of this region as a place to work and live in the future. Decisions to enhance and strengthen such desirability can be made, and must be made, if the aspirations voiced by residents and officials alike are to be achieved. Sound planning, and subsequently sound and consistent implementation, represents one available course of action to derive such end results, and the future of this region in both quantitative and qualitative terms must be anticipated and dealt with now if this region's challenges and opportunities are to be addressed and resolved for mutual benefit. This report and its recommendations are intended to contribute to such desirable courses of individual and collective action.

APPENDIX A

SOCIO-ECONOMIC CHARACTERISTICS OF THE POPULATION

MADISON, ST. CLAIR, MONROE COUNTIES

Table

1 Population Trends, 1800-1970

2 Urban-Rural Population, 1970

3 Population Distribution Trends, 1950-1970, Monroe County

4 Population Distribution Trends, 1950-1970, St. Clair County

5 Population Distribution Trends, 1950-1970, Madison County

6 Percent of Total Population by Age Group, 1970

7 Median Age Per County, 1950-1970

8 Sex Ratio Per County, 1950-1970

9 Racial Makeup of Population, 1960-1970

10 Marital Status, 1950-1970

11 Births and Deaths, 1950-1970

12 Deaths Per 1000 Population and Number of Children Under 5 Per Female of Child-Bearing Age, 1950-1970

13 Household Size, 1960-1970

14 Migration Data, 1960-1970

15 Educational Characteristics, 1960-1970

16 Median Income: Families and Unrelated Individuals, 1950-1970

17 Commuting Patterns Characteristics, 1970

18 Economic Composition of the Population

18A Economic Composition of the Population, 1950-1970

19 Employment Projections: 1970-200, Total Employment - All Industries

20 Employment Projections and Forecasts, Urban Counties Region, 1970-2000

21 Population/Employment Balance Sheet, 1950-2000

Table 1
POPULATION TRENDS
1800 - 1970

Year	Madison County	St. Clair County	Monroe County
1800	-	1,225	-
1810	-	5,007	-
1820	13,550	5,248	1,516
1830	6,221	7,078	2,030
1840	14,433	13,631	4,481
1850	16,265	-	7,679
1860	24,922	37,609	12,832
1870	35,466	51,128	12,982
1880	50,126	61,806	13,682
1890	51,535	66,571	12,948
1900	64,694	86,685	13,847
1910	89,847	119,870	13,508
1920	106,895	136,520	12,839
1930	143,830	157,775	12,369
1940	149,349	166,899	12,754
1950	182,307	205,995	13,282
1960	224,680	262,509	15,507
1970	250,934	285,199	18,831

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1800-1970.

Table 2
URBAN-RURAL POPULATION - 1970
MADISON, ST. CLAIR AND MONROE COUNTIES

County	Total Population	Total Urban	Percent	Total Rural	Percent Change 1960 - 1970 Urban	Percent Change 1960 - 1970 Rural
Madison	250,934	180,369	72	70,565	11.9	11.2
St. Clair	285,199	237,309	83	47,867	10.6	-
Monroe	18,831	8,764	47	10,067	26.8	17.1

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1970.

Table 3
POPULATION DISTRIBUTION TRENDS
MONROE COUNTY - 1950-1970

Precinct	1950 Pop.	1950 % of Total	1960 Pop.	1960 % of Total	1970 Pop.	1970 % of Total
Bluff	661	4.9	633	4.1	796	4.2
Columbia	3,260	24.5	4,303	27.8	5,683	30.2
Harrisonville	1,013	7.6	1,060	6.8	1,066	5.7
Mitchie	570	4.3	564	3.6	504	2.7
Moredock	395	3.0	402	2.6	396	2.1
New Design	1,119	8.4	1,140	7.4	1,378	7.3
New Hanover	373	2.8	427	2.8	552	2.9
Prairie du Long	896	6.8	1,029	6.6	1,340	7.1
Ranault	1,197	9.0	1,065	6.9	1,074	5.7
Waterloo	3,798	28.6	4,884	31.5	6,042	32.1
County Total	13,282	100.0	15,507	100.0	18,831	100.0

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970.

Table 4
POPULATION DISTRIBUTION TRENDS
ST. CLAIR COUNTY - 1950-1970

Township	1950		1960		1970	
	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total
Belleville	32,721	15.9	37,264	14.2	41,699	14.6
Canteen	14,963	7.3	19,810	7.3	20,414	7.2
Caseyville	7,822	3.8	16,872	6.4	25,954	9.1
Centreville	14,884	7.2	39,048	14.9	40,500	14.2
East St. Louis	82,295	40.0	81,712	31.1	69,996	24.5
Engelmann	460	.2	471	.2	499	.2
Fayetteville	1,203	.6	1,277	.5	1,607	.6
Freeburg	2,467	1.2	2,986	1.1	3,678	1.3
Lebanon	3,457	1.7	3,599	1.4	4,244	1.5
Lenzburg	660	.3	646	.3	654	.2
Marissa	2,463	1.2	2,614	1.0	2,818	1.0
Mascoutah	3,962	1.9	4,486	1.7	5,967	2.1
Millstadt	2,775	1.4	3,415	1.3	4,016	1.4
New Athens	2,096	1.0	2,479	.9	2,570	.9
O'Fallon	4,262	2.1	5,886	2.2	9,662	3.4
Prairie du Long	713	.4	782	.3	838	.3
St. Clair	7,374	3.6	13,831	5.3	18,436	6.5
Shiloh Valley	9,899	4.8	8,385	3.2	10,767	3.8
Smithton	1,449	.7	1,533	.6	1,925	.7

(Continued)

Table 4 (Continued)

	1950		1960		1970	
Township	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total
Stites	2,874	1.4	2,103	.8	1,826	.6
Stookey	2,229	1.1	6,725	2.6	9,955	3.5
Sugar Loaf	4,967	2.4	6,585	2.5	7,174	2.5
County Total	205,995	100.0	262,509	100.0	285,199	100.0

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970.

Table 5
POPULATION DISRIBUTION TRENDS
MADISON COUNTY - 1950-1970

	1950		1960		1970	
Township	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total
Alhambra	1,005	.5	1,031	.5	1,152	.5
Alton	32,550	17.9	43,047	19.2	39,700	15.8
Chouteau	3,458	1.9	6,194	2.8	8,521	3.4
Collinsville	15,082	8.3	20,122	9.0	26,396	10.5
Edwardsville	13,459	7.4	15,975	7.1	18,166	7.2
Fort Russell	2,880	1.6	4,190	1.9	5,487	2.2
Foster	1,480	.8	2,072	.9	2,760	1.1
Godfrey	6,561	3.6	10,313	4.6	16,168	6.4
Granite City	25,417	13.9	40,073	17.8	40,440	16.1

(Continued)

Table 5 (Continued)

Township	1950		1960		1970	
	Pop.	% of Total	Pop.	% of Total	Pop.	% of Total
Hamel	1,090	.6	1,200	.5	1,470	.6
Helvetia	4,096	2.2	4,779	2.1	5,902	2.4
Jarvis	2,391	1.3	3,019	1.3	3,957	1.6
Leef	477	.3	499	.2	486	.2
Marine	1,197	.7	1,405	.6	1,475	.6
Moro	973	.5	1,238	.6	1,704	.7
Nameoki	9,230	5.1	9,210	4.1	14,117	5.6
New Douglas	609	.3	634	.3	627	.3
Olive	1,980	1.1	1,970	.9	1,855	.7
Omphghent	1,767	1.0	1,833	.8	1,939	.8
Pin Oak	739	.4	971	.4	1,366	.5
St. Jacob	1,118	.6	1,221	.5	1,394	.6
Saline	1,811	1.0	2,067	.9	2,448	1.0
Venice	14,104	7.7	13,260	5.9	12,925	5.2
Wood River	38,833	21.3	38,366	17.1	40,479	16.1
County Total	182,307	100.0	224,680	100.0	250,934	100.0

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970.

Table 6
PERCENT OF TOTAL POPULATION BY AGE GROUP
MADISON, ST. CLAIR AND MONROE COUNTIES
1970

Age Category	Madison County	St. Clair County	Monroe County
Under 5	8.5	8.9	7.5
5 - 9	10.1	10.8	10.9
10 - 14	10.7	11.5	11.5
15 - 19	9.1	9.5	8.5
20 - 24	7.1	7.0	5.3
25 - 34	12.0	11.0	11.6
35 - 44	11.8	11.8	11.6
45 - 54	11.7	11.1	11.1
55 - 64	9.2	8.9	9.8
Over 65	9.3	9.0	11.2

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1970.

Table 7
MEDIAN AGE PER COUNTY
1950 - 1970

	1950	1960	1970
Madison County	30.7	29.5	28.4
St. Clair County	30.5	28.7	26.8
Monroe County	33.5	32.0	29.8

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970.

Table 8
SEX RATIO PER COUNTY*
1950 - 1970

	1950	1960	1970
Madison County	97.7	95.9	93.5
St. Clair County	104.0	95.4	92.2
Monroe County	106.7	99.0	94.3

*Number of males/100 females (total reported population).

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970.

Table 9
RACIAL MAKEUP OF POPULATION
MADISON, ST. CLAIR AND MONROE COUNTIES
1960 - 1970

		Madison County		St. Clair County		Monroe County	
		1960	1970	1960	1970	1960	1970
Caucasian	#	212,630	237,231	214,363	220,768	15,496	18,812
	%	94.6	94.5	81.7	77.4	99.9	99.9
Negro	#	11,933	13,053	47,857	63,512	1	4
	%	5.3	5.2	18.2	22.3	.04	.02
Other	#	126	650	289	896	10	15
	%	.1	.3	.1	.3	.06	.08
County Total	#	244,689	250,934	262,509	285,176	15,507	18,831
	%	100.0	100.0	100.0	100.0	100.0	100.0

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1960, 1970.

Table 10
MARITAL STATUS*
MADISON, ST. CLAIR AND MONROE COUNTIES
1950 - 1970

	1950			1960			1970		
	Mad.	St.C.	Mon.	Mad.	St.C.	Mon.	Mad.	St.C.	Mon.
Percent single	20.3	22.9	24.8	18.6	18.9	21.4	22.4	24.9	22.7
Percent married	70.0	66.5	66.1	71.8	70.2	69.3	66.9	63.2	67.6
Percent widowed and divorced	9.7	10.6	9.1	9.6	10.9	9.3	10.7	11.9	9.7

*Total population, 14 years and older.

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970.

Table 11
BIRTHS AND DEATHS
MADISON, ST. CLAIR AND MONROE COUNTIES
1950 - 1970

	Madison County		St. Clair County		Monroe County	
Year	Births	Deaths	Births	Deaths	Births	Deaths
1950	4,288	1,610	4,851	2,162	274	135
1955	5,304	1,813	6,488	2,288	302	152
1960	5,489	1,861	6,867	2,511	357	196
1965	4,763	2,060	5,754	2,726	329	180
1970	4,561	2,247	5,114	2,801	314	174

Source: State of Illinois, Department of Public Health.

Table 12
DEATHS PER 1000 POPULATION AND NUMBER OF CHILDREN UNDER 5 PER FEMALE OF CHILD-BEARING AGE*
MADISON, ST. CLAIR AND MONROE COUNTIES
1950 - 1960

	Madison County		St. Clair County		Monroe County	
Year	Deaths per 1000 Pop.	Children per Female	Deaths per 1000 Pop.	Children per Female	Deaths per 1000 Pop.	Children per Female
1950	8.83	.394	10.50	.395	10.16	.402
1960	8.28	.509	9.57	.552	12.64	.514
1970	8.96	.353	9.82	.371	9.24	.365

*Child-bearing age - 15 to 49.

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1950, 1960, 1970;
State of Illinois, Department of Public Health;
Southwestern Illinois Metropolitan and Regional Planning Commission.

Table 13
HOUSEHOLD SIZE
1960 - 1970

	Madison County	St. Clair County	Monroe County
1960	3.29	3.34	3.31
1970	3.15	3.25	3.23

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1960, 1970.

Table 14
MIGRATION DATA
MADISON, ST. CLAIR AND MONROE COUNTIES
1960 - 1970

		Moved to County In Previous Five Years	From Illinois	From Another State	From Abroad
Madison	1960	25,159	10,792	13,471	896
	1970	28,255	13,738	13,441	1,076
St. Clair	1960	42,100	9,118	29,994	2,988
	1970	36,243	8,996	23,078	4,169
Monroe	1960	2,080	1,092	957	31
	1970	2,632	1,555	1,012	65

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1960, 1970.

Table 15
EDUCATIONAL CHARACTERISTICS
MADISON, ST. CLAIR AND MONROE COUNTIES
1960 - 1970

	Madison Co.		St. Clair Co.		Monroe Co.		Illinois	
	1960	1970	1960	1970	1960	1970	1960	1970
Nursery thru High School Enrollment (000's)	52.5	67.5	59.3	79.8	3.4	6.1	2181.0	2884.8
College Enrollment (000's)	1.9	6.8	2.7	7.3	.1	.3	156.8	386.3
Median School Years Completed	9.1	11.5	9.1	11.0	8.6	10.4	10.5	12.1

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1960, 1970.

Table 16
MEDIAN INCOME: FAMILIES AND UNRELATED INDIVIDUALS
1950 - 1970

	1950	1960	1970
State of Illinois	$3,163	$5,589	$10,959
St. Louis SMSA	2,966	5,489	10,504
Madison County	3,239	5,816	10,249
St. Clair County	2,631	5,219	9,547
Monroe County	2,669	4,886	9,352

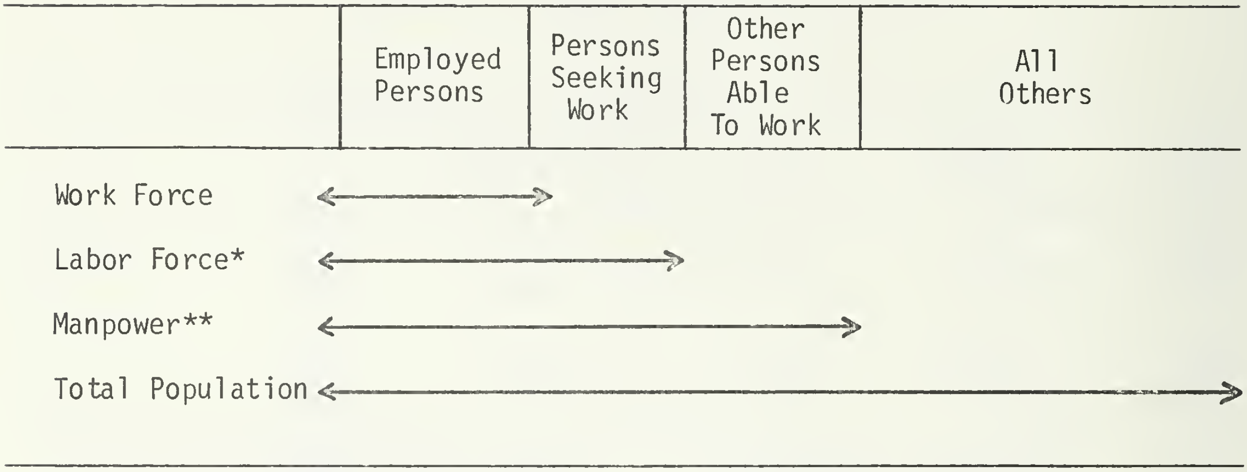
Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1970.

Table 17
COMMUTING PATTERNS CHARACTERISTICS
1970

Place of Work	Madison County	St. Clair County	Monroe County
All Workers	91,363	99,749	6,806
Worked in County of Residence	56,871	58,725	2,892
Percent of All Workers	62.2	58.9	42.5
Worked Outside County of Residence	29,345	33,174	3,194
Place of Work not Reported	5,147	7,850	720

Source: U.S. Department of Commerce, Bureau of the Census, U.S. Census of Population, 1970.

Table 18
ECONOMIC COMPOSITION OF THE POPULATION



*total employed + unemployed
**total population, ages 14-65

Table 18A
ECONOMIC COMPOSITION OF THE POPULATION BY PLACE OF RESIDENCE
MADISON, ST. CLAIR, MONROE COUNTIES
1950 - 1970

		Madison County	St. Clair County	Monroe County	Regional Total
1950	Population	182,307	205,995	13,282	401,584
	Manpower*	120,436	138,967	8,529	267,932
	Labor Force**	73,791	85,133	5,346	164,270
	Work Force***	69,665	72,573	5,239	147,477
1960	Population	225,200	262,509	15,507	502,705
	Manpower*	134,041	152,760	9,038	295,839
	Labor Force**	85,739	95,451	6,013	187,203
	Work Force***	80,757	85,859	5,827	172,443
1970	Population	250,934	285,174	18,831	554,939
	Manpower*	153,600	170,019	10,973	334,592
	Labor Force**	99,499	107,844	7,080	214,433
	Work Force***	93,229	96,020	6,869	196,118

*total population, ages 14-65
**total employment + unemployment
***employment

Table 19
EMPLOYMENT PROJECTIONS: 1970 - 2000
TOTAL EMPLOYMENT - ALL INDUSTRIES
MADISON, ST. CLAIR, MONROE COUNTIES

	1970	1980	1990	2000
Madison County	87,764	102,586	115,191	132,059
St. Clair County	76,185	84,405	92,792	106,380
Monroe Counties	3,860	4,402	5,333	6,114
Total	167,809	191,393	213,316	244,553

Source: Southwestern Illinois Metropolitan and Regional Planning Commission, 1974.

Table 20
EMPLOYMENT PROJECTIONS AND FORECASTS, URBAN COUNTIES REGION
MADISON, ST. CLAIR AND MONROE COUNTIES: 1970-2000

	1970	% of Total	% CHG	1980	% of Total	% CHG	1990	% of Total	% CHG	2000	% of Total
AGRICULTURE, FORESTRY AND FISHERIES	3,906	2.3	-20.2	3,117	1.6	-20.3	2,487	1.2	-19.7	2,000	.8
MINING	1,025	.6	11.4	1,142	.6	7.8	1,231	.6	4.9	1,291	.5
CONTRACT CONSTRUCTION	4,965	3.0	24.9	6,201	3.2	10.7	6,865	3.2	11.0	7,620	3.1
MANUFACTURING	49,115	29.3	10.5	54,272	28.4	9.1	59,210	27.8	11.4	65,959	27.0
Durables	31,600		14.6	36,216		10.9	40,163		11.8	44,580	
Lumber and Furniture	250		15.9	289		9.9	318		8.6	343	
Primary Metals	15,725		13.6	17,876		13.6	20,307		11.0	22,540	
Fabricated Metal	1,625		16.3	1,890		12.4	2,124		12.0	2,378	
Machinery, except elec.	1,950		13.1	2,205		9.5	2,414		13.4	2,728	
Electrical Machinery	1,300		12.2	1,458		10.9	1,617		11.0	1,795	
Misc., all others	10,750		15.5	12,418		7.8	13,383		10.5	14,796	
Nondurables	17,515		3.1	18,056		5.5	19,047		12.2	21,379	
Food and Kindred Prod.	4,765		-12.0	4,194		-6.1	3,939		11.0	4,372	
Textiles and Apparel	1,450		8.5	1,573		8.5	1,699		4.0	1,767	
Paper and Allied Prod.	1,750		6.8	1,869		8.9	2,018		10.7	2,234	
Printing & Publishing	900		12.6	1,013		12.2	1,134		9.0	1,236	
Chemicals and Allied	4,175		9.8	4.584		7.3	4,904		12.6	5,512	
Petroleum and Coal Prod.	3,625		6.1	3,846		11.2	4,269		10.4	4,712	
Misc., all others	875		11.9	977		11.0	1,084		42.6	1,546	
TRANSPORTATION, COMM., AND PUBLIC UTILITIES	13,895	8.3	6.4	14,784	7.7	5.8	15,641	7.3	11.6	17,455	7.1
TRADE	26,830	16.0	16.3	31,203	16.3	17.2	36,569	17.1	20.6	44,102	18.0
FINANCE, REAL ESTATE AND INSURANCE	5,435	3.2	21.9	6,625	3.5	13.3	7,506	3.5	14.3	8,579	3.5
SERVICES	21,462	12.8	14.9	24,659	12.9	10.0	27,124	12.7	17.9	31,979	13.1
CIVILIAN GOVERNMENT	28,226	16.8	25.6	35,451	18.5	14.3	40,520	19.0	15.3	46,719	19.2
ALL OTHER NON-ARGICULTURAL IND.	12,950	7.7	7.6	13,939	7.3	15.9	16,163	7.6	16.6	18,849	7.7
TOTAL: ALL INDUSTRIES	167,809	100.0	14.1	191,393	100.0	11.5	213,316	100.0	14.6	244,553	100.0

Source: Illinois State Employment Service State of Illinois, Office of Management and Budget
U.S. Department of Commerce, Bureau of Economic Analysis

Table 21
POPULATION/EMPLOYMENT BALANCE SHEET
MADISON, ST. CLAIR AND MONROE COUNTIES: 1950-2000

	1950	% CHG	1960	% CHG	1970	% CHG	1980	% CHG	1990	% CHG	2000
INDUSTRY EMPLOYMENT	141,928	11.4	158,089	6.1	167,809	14.8	191,393	12.5	213,316	14.0	244,553
*COMMUTERS (NET)	5,549		14,354		28,309		34,888		46,895		49,860
WORK FORCE	147,477	16.9	172,443	13.7	196,118	15.4	226,281	15.0	260,211	13.1	294,413
UNEMPLOYED	7,429		10,882		12,010		13,169		15,144		17,135
CIVILIAN LABOR FORCE	154,906	18.3	183,325	13.5	208,128	15.0	239,450	15.0	275,355	13.1	311,548
MILITARY	9,364		3,878		6,305		5,509		6,253		7,427
LABOR FORCE	164,270	13.9	187,203	14.5	214,433	14.2	244,959	11.7	273,608	11.9	306,121
DECIDED DEPENDENTS	103,662		108,636		120,159		136,918		159,900		178,159
MANPOWER	267,932	10.4	295,839	13.1	334,592	14.1	381,877	13.5	433,508	11.7	484,280
DETERMINED DEPENDENTS	133,652		207,377		220,347		240,073		272,532		304,450
TOTAL POPULATION	401,584	25.3	503,216	8.3	554,939	14.1	621,950	13.5	706,040	11.7	788,730
1. Civilian Labor Force Participation Ratio	38.6		36.4		37.5		38.5		39.0		39.5
2. Unemployment	4.8		5.9		5.7		5.5		5.5		5.5
3. Commuting Ratio (Net)	3.8		8.3		14.4		15.4		18.0		16.9

Sources: Illinois State Employment Service
U.S. Department of Commerce, Bureau of the Census
U.S. Department of Commerce, Bureau of Economic Analysis

*Net Commuters - Refers to the number of persons living in the three-county area but working elsewhere. Net commuters is determined by subtracting total three-county industry employment from total employment of residents. This figure corresponds with net commuters derived by subtracting total in commuters from total out commuters. (TE - IE = CN = C out - C in)

APPENDIX B

POPULATION PROJECTIONS

1975 - 2010

MADISON, ST. CLAIR, MONROE COUNTIES

Table 1
MADISON COUNTY
POPULATION TRENDS AND PROJECTIONS
(1960 - 2010)

	1960	1970	1975	1980	1985	1990	1995	2000	2005	2010
ALHAMBRA TWP.	1,031	1,152	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550
Alhambra	537	594	625	650	675	700	725	750	775	800
ALTON TWP.	43,047	39,700	40,850	42,000	43,000	44,000	45,000	46,000	47,500	49,000
CHOUTEAU TWP.	6,194	8,521	9,260	10,000	10,500	11,000	11,500	12,000	12,500	13,000
Hartford	2,355	2,243	2,300	2,350	2,375	2,400	2,450	2,500	2,500	2,500
South Roxana	2,010	2,243	2,300	2,350	2,375	2,400	2,450	2,500	2,500	2,500
COLLINSVILLE TWP.	20,122	26,396	30,000	34,000	38,000	42,000	46,000	49,800	54,000	58,000
Collinsville	14,217	18,015	20,550	23,100	24,100	25,100	26,600	28,100	29,550	31,000
Maryville	675	1,290	1,295	3,000	4,500	6,000	8,500	11,000	12,000	13,000
EDWARDSVILLE TWP.	15,975	18,166	21,500	25,200	28,200	31,200	34,500	37,800	41,550	45,300
Edwardsville	9,996	11,070	12,525	14,000	16,000	18,000	20,000	21,100	22,600	24,000
Glen Carbon	1,241	1,897	3,550	5,200	6,200	7,200	9,500	11,800	13,550	15,300
FORT RUSSELL TWP.	4,190	5,487	6,750	8,000	9,000	10,000	11,000	12,000	13,000	14,000
Bethalto	3,235	7,332	8,600	9,900	10,700	11,500	12,250	13,000	14,500	16,000
FOSTER TWP.	2,072	2,760	3,125	3,500	3,900	4,300	4,700	5,100	5,800	6,500
GODFREY TWP.	10,313	16,168	19,100	22,000	24,900	27,800	30,400	33,000	36,000	39,000
GRANITE CITY TWP.	40,073	40,440	41,750	42,600	45,600	48,600	50,300	52,000	53,500	55,000
HAMEL TWP.	1,200	1,470	1,600	1,700	1,900	2,100	2,275	2.450	2,675	2,900
Hamel	362	454	475	500	550	600	650	700	750	800
HELVETIA TWP.	4,779	5,902	6,200	6,500	6,800	7,100	7,300	7,500	7,650	7,800
Highland	4,943	5,981	6,600	7,200	7,550	7,900	8,250	8,600	9,350	10,100
JARVIS TWP.	3,019	3,957	5,000	6,000	7,500	9,000	11,000	13,650	16,000	18,500
Troy	1,778	2,144	2,425	2,700	3,600	4,500	6,000	7,800	9,400	11,000
LEEF TWP.	499	486	490	500	500	500	500	500	500	500
Grantfork	134	162	166	170	175	180	185	190	195	200
MARINE TWP.	1,405	1,475	1,485	1,500	1,550	1,600	1,650	1,700	1,750	1,800
Marine	813	882	890	900	975	1,050	1,100	1,150	1,225	1,300
MORO TWP.	1,238	1,704	1,950	2,200	2,450	2,700	2,950	3,200	3,450	3,700
NAMEOKI TWP.	9,210	14,117	14,550	15,000	15,500	16,000	16,500	17,000	17,500	18,000
Pontoon Beach	1,107	2,448	2,875	3,300	3,450	3,600	3,800	4,000	4,200	4,400
NEW DOUGLAS TWP.	634	627	635	650	660	675	700	725	750	775
New Douglas	367	390	410	425	450	475	485	500	510	525
OLIVE TWP.	1,970	1,855	1,875	1,900	1,910	1,925	1,950	1,975	1,985	2,000
Livingston	964	940	945	950	975	1,000	1,025	1,050	1,075	1,100
Williamson	324	329	340	350	360	375	385	400	410	425
OMPHGHENT TWP.	1,833	1,939	2,025	2,100	2,150	2,200	2,250	2,300	2,350	2,400
Worden	1,060	1,072	1,085	1,100	1,150	1,200	1,250	1,300	1,350	1,400
PIN OAK TWP.	971	1,366	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000
ST. JACOB TWP.	1,221	1,394	1,450	1,500	1,525	1,550	1,575	1,600	1,625	1,650
St. Jacob	529	659	680	700	725	750	775	800	825	850
SALINE TWP.	2,067	2,448	2,675	2,900	3,100	3,300	3,500	3,700	3,900	4,100
VENICE TWP.	13,260	12,925	12,825	12,700	12,650	12,600	12,550	12,500	12,450	12,400
Madison	6,861	7,042	7,070	7,100	7,150	7,200	7,250	7,300	7,350	7,400
Venice	5,380	4,680	4,840	4,700	4,750	4,800	4,850	4,900	4,950	5,000
WOOD RIVER TWP.	38,366	40,479	41,250	42,000	43,000	44,000	45,000	46,000	48,000	50,000
East Alton	7,630	7,309	7,600	7,900	8,300	8,700	9,250	9,800	10,400	11,000
Roxana	2,090	1,882	1,890	1,900	1,925	1,950	1,975	2,000	2,050	2,100
Wood River	11,694	13,186	13,950	14,700	15,600	16,500	17,750	19,000	20,500	22,000
TOTAL COUNTY	224,680	250,934	269,345	287,550	307,595	327,700	346,900	366,550	388,735	410,875

Table 2

MADISON COUNTY
PERCENT CHANGE IN POPULATION
(1960-2010)

	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1970-2010
ALHAMBRA TOWNSHIP	11.7	8.5	8.0	7.4	6.9	34.5
Alhambra	10.6	9.4	7.7	7.1	6.7	34.7
ALTON TOWNSHIP	-7.8	5.8	4.8	4.5	6.5	23.4
CHOUTEAU TOWNSHIP	37.6	17.4	10.0	9.0	8.3	52.6
Hartford	-4.8	4.8	2.1	4.2	0.0	11.5
South Roxana	11.6	4.8	2.1	4.2	0.0	11.5
COLLINSVILLE TOWNSHIP	31.2	28.8	23.5	18.6	16.5	120.0
Collinsville	26.7	28.2	8.7	12.0	10.3	72.1
Maryville	91.1	132.6	100.0	83.3	18.2	907.8
EDWARDSVILLE TOWNSHIP	13.7	38.7	23.8	21.2	19.8	149.4
Edwardsville	10.7	26.5	28.6	17.2	13.7	116.8
Glen Carbon	52.9	174.1	38.5	63.9	29.7	706.5
FORT RUSSELL TOWNSHIP	31.0	45.8	25.0	20.0	16.7	155.1
Bethalto	126.6	35.0	16.2	13.0	23.1	118.2
FOSTER TOWNSHIP	33.2	26.8	22.9	18.6	27.5	135.5
GODFREY TOWNSHIP	56.8	36.1	26.4	18.7	18.2	141.2
GRANITE CITY TOWNSHIP	.9	5.3	14.1	7.0	5.8	36.0
HAMEL TOWNSHIP	22.5	15.6	23.5	16.7	18.4	97.3
Hamel	25.4	10.1	20.0	16.7	14.3	76.2
HELVETIA TOWNSHIP	23.5	10.1	9.2	5.6	4.0	32.2
Highland	21.0	20.4	9.7	8.9	17.4	68.9
JARVIS TOWNSHIP	31.1	51.6	50.0	51.7	35.5	367.5
Troy	20.6	25.9	66.7	73.3	41.0	413.1
LEEF TOWNSHIP	-2.6	2.9	0.0	0.0	0.0	
Grantfork	20.9	4.9	5.9	5.6	5.3	23.5
MARINE TOWNSHIP	5.0	1.7	6.7	6.3	5.9	22.0
Marine	8.5	2.0	16.7	9.5	13.0	47.4
MORO TOWNSHIP	37.6	29.1	22.7	18.5	15.6	117.1
NAMEOKI TOWNSHIP	53.3	6.3	6.7	6.3	5.9	27.5
Pontoon Beach	121.1	34.8	9.1	11.1	10.0	79.7
NEW DOUGLAS TOWNSHIP	-1.1	3.7	3.8	7.4	6.9	23.6
New Douglas	6.3	9.0	11.8	5.3	5.0	34.6
OLIVE TOWNSHIP	-5.8	2.4	1.3	2.6	1.3	7.8
Livingston	-2.5	1.1	5.3	5.0	4.8	17.0
Williamson	1.5	6.4	7.1	6.7	6.3	29.2
OMPHGHENT TOWNSHIP	5.8	8.3	4.8	4.5	4.3	23.8
Worden	1.1	2.6	9.1	8.3	7.7	30.6
PIN OAK TOWNSHIP	40.7	31.8	22.2	18.2	15.4	119.6
ST. JACOB TOWNSHIP	14.2	7.6	3.3	3.2	3.1	18.4
St. Jacob	24.6	6.2	7.1	6.7	6.3	29.0
SALINE TOWNSHIP	18.4	18.5	13.8	12.1	10.8	67.5
VENICE TOWNSHIP	-2.5	-1.7	-0.8	-0.8	-0.8	-4.1
Madison	2.6	0.8	1.4	1.4	1.4	5.1
Venice	-13.0	0.4	2.1	2.1	2.0	6.8
WOOD RIVER TOWNSHIP	5.5	3.8	4.8	4.5	8.7	23.5
East Alton	-4.2	8.1	10.1	12.6	12.2	50.5
Roxana	-10.0	1.0	2.6	2.6	5.0	11.6
Wood River	12.8	11.5	12.2	15.2	15.8	66.8
TOTAL COUNTY	11.7	14.6	14.0	11.9	12.1	63.7

Table 3

ST. CLAIR COUNTY
POPULATION TRENDS AND PROJECTIONS
(1960 - 2010)

	1960	1970	1975	1980	1985	1990	1995	2000	2005	2010
BELLEVILLE TWP.	37,264	41,699	44,300	46,900	49,600	52,300	55,350	58,400	61,900	65,400
CANTEEN TWP.	19,810	20,414	20,700	21,000	21,250	21,500	21,750	22,000	22,150	22,300
Fairmont City	2,688	2,769	2,885	3,000	3,100	3,200	3,250	3,300	3,350	3,400
Washington Park	6,601	9,524	9,700	9,900	9,950	10,000	10,150	10,300	10,45	10,600
CASEYVILLE TWP.	16,872	25,954	29,000	32,000	36,400	40,800	44,700	48,600	43,600	58,600
Fairview Heights	-	14,274	17,050	19,800	23,400	27,000	31,000	35,000	39,000	43,000
Caseyville	2,455	3,411	3,800	4,200	4,600	5,000	5,300	5,600	5,850	6,100
CENTREVILLE TWP.	39,048	40,500	41,100	41,700	42,350	43,000	43,650	44,300	44,950	45,600
Alorton	3,282	3,573	3,585	3,600	3,650	3,700	3,750	3,800	3,850	3,900
Cahokia	15,829	20,648	21,125	21,600	22,100	22,600	23,100	23,600	24,100	24,600
Centreville	12,769	11,378	11,550	11,700	11,850	12,000	12,200	12,400	12,600	12,800
Sauget	324	220	210	200	200	200	200	200	200	200
EAST ST. LOUIS TWP.	81,712	69,996	66,900	63,800	63,800	63,800	64,900	66,000	67,500	69,000
ENGELMANN TWP.	471	499	500	500	500	500	500	500	500	500
FAYETTEVILLE TWP.	1,277	1,607	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
Fayetteville	294	379	440	500	600	700	800	900	1,000	1,100
St. Libory	346	448	475	500	500	500	500	500	500	500
FREEBURG TWP.	2,986	3,678	3,900	4,100	4,350	4,600	4,850	5,100	5,350	5,600
Freeburg	1,908	2,495	2,750	3,000	3,300	3,600	3,900	4,200	4,500	4,800
LEBANON TWP.	3,599	4,244	4,700	5,150	5,575	6,000	6,475	6,950	7,475	8,000
Lebanon	2,863	3,564	3,925	4,300	4,700	5,100	5,550	6,000	6,500	7,000
Summerfield	353	443	475	500	500	500	500	500	500	600
LENZBURG TWP.	646	654	675	700	695	690	685	680	675	670
Lenzburg	420	434	470	500	500	500	500	500	500	500
MARISSA TWP.	2,614	2,818	2,975	3,150	3,225	3,300	3,375	3,450	3,625	3,800
Marissa	1,722	2,210	2,400	2,600	2,700	2,800	2,900	3,000	3,200	3,400
MASCOUTAH TWP.	4,486	5,967	6,575	7,200	7,700	8,200	8,750	9,300	9,850	10,400
Mascoutah	3,625	5,049	5,675	6,300	6,800	7,300	7,850	8,400	8,950	9,500
MILLSTADT TWP.	3,415	4,016	4,350	4,700	4,950	5,200	5,500	5,800	6,150	6,500
Millstadt	1,830	2,332	2,525	2,700	2,950	3,200	3,500	3,800	4,150	4,500
NEW ATHENS TWP.	2,479	2,570	2,775	2,800	2,900	3,000	3,150	3,300	3,450	3,600
New Athens	1,923	2,000	2,150	2,300	2,450	2,600	2,750	2,900	3,050	3,200
O'FALLON TWP.	5,886	9,662	12,225	14,800	17,400	20,000	22,800	25,600	28,000	30,400
O'Fallon	4,018	9,365	10,975	12,600	14,900	17,200	19,750	22,300	24,850	27,400
PRAIRIE DU LONG TWP.	782	838	870	900	900	900	900	900	900	900
ST. CLAIR TWP.	13,831	18,436	20,275	22,100	24,100	26,100	28,050	30,000	32,000	34,000
Swansea	3,018	5,432	5,750	6,100	6,500	6,900	7,250	7,600	7,900	8,200
SHILOH VALLEY TWP.	8,385	10,767	11,350	11,900	12,600	13,300	14,550	15,800	17,650	19,500
Shiloh	701	945	1,075	1,200	1,400	1,600	1,900	2,200	2,350	2,500
SMITHTON TWP.	1,533	1,945	2,175	2,400	2,650	2,900	3,150	3,400	3,650	3,900
Smithton	629	847	925	1,000	1,150	1,300	1,450	1,600	1,750	1,900
STITES TWP.	2,103	1,826	1,815	1,800	1,800	1,800	1,750	1,700	1,650	1,600
Brooklyn	1,922	1,702	1,700	1,700	1,700	1,700	1,650	1,600	1,550	1,500
National City	117	124	110	100	100	100	100	100	100	100
STOOKEY TWP.	6,725	9,955	10,975	12,000	13,000	14,000	15,000	16,000	17,000	18,000
SUGAR LOAF TWP.	6,585	7,174	7,400	7,600	7,900	8,200	8,500	8,800	9,050	9,300
Dupo	2,937	2,841	2,925	3,000	3,050	3,100	3,150	3,200	3,250	3,300
East Carondelet	463	542	545	550	525	500	500	500	500	500
TOTAL COUNTY	262,509	285,199	297,235	309,000	325,545	342,990	360,435	378,780	399,375	419,970

Table 4

ST. CLAIR COUNTY
PERCENT CHANGE IN POPULATION
(1960-2010)

	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1970-2010
BELLEVILLE TOWNSHIP	11.9	12.5	11.5	11.7	12.0	56.8
CANTEEN TOWNSHIP	3.0	2.9	2.4	2.3	1.4	9.2
Fairmont City	3.0	8.3	6.7	3.1	3.0	22.8
Washington Park	44.3	3.9	1.0	3.0	2.9	11.3
CASEYVILLE TOWNSHIP	54.3	23.3	27.5	19.1	20.6	125.8
Fairview Heights		38.7	36.4	29.6	22.9	201.2
Caseyville	38.9	23.1	19.0	12.0	8.9	78.8
CENTREVILLE TOWNSHIP	3.7	3.0	3.1	3.0	2.9	12.6
Alorton	8.9	0.8	2.8	2.7	2.6	9.2
Cahokia	30.4	4.6	4.6	4.4	4.2	19.1
Centreville	-10.9	2.8	2.6	3.3	3.2	12.5
Sauget	-32.1	-9.1	0.0	0.0	0.0	-9.1
EAST ST. LOUIS TOWNSHIP	-14.3	-8.9	0.0	3.4	4.5	-1.4
ENGELMANN TOWNSHIP	5.9	0.2	0.0	0.0	0.0	0.2
FAYETTEVILLE TOWNSHIP	25.8	12.0	11.1	10.0	9.1	49.3
Fayetteville	28.9	31.9	40.0	28.6	22.2	190.2
St. Libory	29.5	11.6	0.0	0.0	0.0	11.6
FREEBURG TOWNSHIP	23.2	11.5	12.2	10.9	9.8	52.3
Freeburg	30.8	20.2	20.0	16.7	14.3	92.4
LEBANON TOWNSHIP	17.9	21.3	16.5	15.8	15.1	88.5
Lebanon	24.5	20.7	18.6	17.6	16.7	96.4
Summerfield	25.5	12.9	0.0	0.0	20.0	35.4
LENZBURG TOWNSHIP	1.2	7.0	-1.4	-1.4	-1.5	2.4
Lenzburg	3.3	15.2	0.0	0.0	0.0	15.2
MARISSA TOWNSHIP	7.8	11.8	4.8	4.5	10.1	34.8
Marissa	28.3	17.6	7.7	7.1	13.3	53.8
MASCOUTAH TOWNSHIP	33.0	20.7	13.9	13.4	11.8	74.3
Mascoutah	39.3	24.8	15.9	15.1	13.1	88.2
MILLSTADT TOWNSHIP	17.6	17.0	10.6	11.5	12.1	61.9
Millstadt	27.4	15.8	18.5	18.8	18.4	93.0
NEW ATHENS TOWNSHIP	3.7	8.9	7.1	10.0	9.1	40.1
New Athens	4.0	15.0	13.0	11.5	10.3	60.0
O'FALLON TOWNSHIP	64.2	53.2	35.1	28.0	18.8	214.6
O'Fallon	133.1	34.5	36.5	29.7	22.9	192.6
PRAIRIE DU LONG TOWNSHIP	7.2	7.4	0.0	0.0	0.0	7.4
ST. CLAIR TOWNSHIP	33.3	19.9	18.1	14.9	13.3	84.4
Swansea	80.0	12.3	13.1	10.1	7.9	51.0
SHILOH VALLEY TOWNSHIP	28.4	10.5	11.8	18.8	23.4	81.1
Shiloh	34.8	27.0	33.3	37.5	13.6	164.6
SMITHTON TOWNSHIP	26.9	23.4	20.8	17.2	14.7	100.5
Smithton	34.7	18.1	20.0	23.1	18.8	124.3
STITES TOWNSHIP	-13.2	-1.4	0.0	-5.6	-5.9	-12.4
Brooklyn	-11.4	-0.1	0.0	-5.9	-6.3	-11.9
National City	6.0	-19.4	0.0	0.0	0.0	-19.4
STOOKEY TOWNSHIP	48.0	20.5	16.7	14.3	12.5	80.8
SUGAR LOAF TOWNSHIP	8.9	5.9	7.9	7.3	5.7	29.6
Dupo	-3.3	5.6	3.3	3.2	3.1	16.2
East Carondelet	17.1	1.5	-9.1	0.0	0.0	1.5
TOTAL COUNTY	8.6	8.4	11.0	10.4	10.9	55.2

Table 5

MONROE COUNTY
POPULATION TRENDS AND PROJECTIONS
(1960 - 2010)

	1960	1970	1975	1980	1985	1990	1995	2000	2005	2010
BLUFF PREC.	633	796	825	850	875	900	925	950	975	1,000
COLUMBIA PREC.	4,303	5,683	7,048	9,200	11,700	14,200	16,200	18,200	19,100	20,000
Columbia	3,174	4,188	5,500	6,100	6,800	7,500	8,200	8,900	9,500	10,100
Chapel Spring (part)		-	-	1,500	3,250	5,000	6,250	7,500	7,750	8,000
HARRISONVILLE PREC.	1,060	1,066	1,135	1,200	1,250	1,300	1,350	1,400	1,450	1,500
Valmeyer	709	733	765	800	850	900	950	1,000	1,050	1,100
MITCHIE PREC.	564	504	502	500	500	500	500	500	500	500
Mayestown	158	109	105	100	100	100	100	100	100	100
MOREDOCK PREC.	402	396	398	400	400	400	400	400	400	400
NEW DESIGN PREC.	1,140	1,378	1,440	1,500	1,550	1,600	1,650	1,700	1,750	1,800
NEW HANOVER PREC.	427	552	625	2,200	4,000	5,800	7,100	8,400	8,700	9,000
Chapel Spring (part)	-	-	-	1,500	3,250	5,000	6,250	7,500	7,750	8,000
PRAIRIE DU LONG PREC.	1,029	1,340	1,420	1,500	1,550	1,600	1,650	1,700	1,750	1,800
Hecker	313	380	440	500	550	600	650	700	750	800
RENAULT PREC.	1,065	1,074	1,080	1,100	1,100	1,100	1,100	1,100	1,100	1,100
Fults	90	101	100	100	100	100	100	100	100	100
WATERLOO PREC.	4,884	6,042	6,500	6,950	7,450	7,950	8,500	9,050	9,700	10,350
Waterloo	3,739	4,546	4,950	5,350	5,800	6,250	6,750	7,250	7,850	8,450
TOTAL COUNTY	15,507	18,831	20,973	25,400	30,375	35,350	39,375	43,400	45,425	47,450

Table 6

MONROE COUNTY
PERCENT CHANGE IN POPULATION
(1960-2010)

	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	1970-2010
BLUFF PREC.	25.8	6.8	5.9	5.6	5.3	25.6
COLUMBIA PREC.	32.1	61.9	54.3	28.2	9.9	251.9
Columbia	31.9	45.7	23.0	18.7	13.5	141.2
Chapel Spring (Part)	0.0	0.0	233.3	50.0	6.7	
HARRISONVILLE PREC.	0.6	12.6	8.3	7.7	7.1	40.7
Valmeyer	3.4	9.1	12.5	11.1	10.0	50.1
MITCHIE PREC.	-10.6	-0.8	0.0	0.0	0.0	-0.8
Maeystown	-31.0	-8.3	0.0	0.0	0.0	-8.3
MOREDOCK PREC.	-1.5	1.0	0.0	0.0	0.0	1.0
NEW DESIGN PREC.	20.9	8.9	6.7	6.3	5.9	30.6
NEW HANOVER PREC.	29.3	298.6	163.6	44.8	7.1	1530.4
Chapel Spring (Part)	0.0	0.0	233.3	50.0	6.7	0.0
PRAIRIE DU LONG PREC.	3.0	11.9	6.7	6.3	5.9	34.3
Hecker	21.4	31.6	20.0	16.7	14.3	110.5
RENAULT PREC.	0.8	2.4	0.0	0.0	0.0	2.4
Fults	12.2	-1.0	0.0	0.0	0.0	-1.0
WATERLOO PREC.	23.7	15.0	14.4	13.8	14.4	71.3
Waterloo	21.6	17.7	16.8	16.0	16.6	85.9
TOTAL COUNTY	21.4	34.9	39.2	22.8	9.3	152.0

Table 7
RANDOLPH COUNTY POPULATION TRENDS AND PROJECTIONS
(1950 - 2010)

	1950	1960	1970	1980	1990	2000	2010
RANDOLPH COUNTY	31,673	29,988	31,379	35,356	41,674	47,205	52,716
BALDWIN PRECINCT	927	906	959	1,080	1,245	1,450	1,600
Baldwin	354	336	467	560	655	800	970
BLAIR PRECINCT	300	253	278	290	320	343	370
BREMEN PRECINCT	553	454	446	453	469	485	500
BREWERVILLE PRECINCT	635	426	414	423	440	472	510
CENTRAL PRECINCT	446	395	345	350	383	397	535
CHESTER PRECINCT	9,346	8,663	8,157	8,603	9,745	11,523	13,000
Chester	5,389	4,460	5,310	6,160	7,080	8,000	8,600
COULTERVILLE PRECINCT	1,615	1,529	1,663	1,765	1,830	1,980	2,070
Coulterville	1,160	1,022	1,186	1,230	1,000	1,140	1,200
ELLIS GROVE PRECINCT	751	636	745	795	825	846	908
Ellis Grove	258	218	277	300	350	372	390
EVANSVILLE PRECINCT	1,220	1,212	1,244	1,390	1,485	1,569	1,730
Evansville	821	846	838	910	1,200	1,300	1,500
KASKASKIA PRECINCT	437	369	293	310	345	400	450
Kaskaskia	-	97	79	920	105	112	120
PALESTINE PRECINCT	398	367	423	450	487	503	515
PERCY PRECINCT	1,299	1,011	1,129	1,200	1,230	1,300	1,400
Percy	933	810	967	1,100	1,160	1,210	1,275
PRAIRIE DU ROCHER PREC.	1,252	1,219	1,113	1,198	1,250	1,339	1,500
Prairie du Rocher	622	679	658	700	760	817	900
RED BUD PRECINCT	2,354	2,823	3,445	4,720	7,200	8,700	9,600
Red Bud	1,519	1,942	2,559	3,390	5,800	7,200	8,200
ROCKWOOD PRECINCT	583	365	234	218	222	229	240
Rockwood	-	98	59	64	70	76	88
RUMA PRECINCT	529	597	585	603	627	680	718
Ruma	107	138	154	168	187	200	220
SPARTA PRECINCT	4,937	4,798	5,371	6,389	7,800	8,900	10,700
Sparta	3,576	3,452	4,307	5,160	6,900	8,000	9,400
STEELEVILLE PRECINCT	1,827	1,954	2,406	2,900	3,390	3,600	3,700
Steeleville	1,353	1,569	1,957	2,400	2,900	3,200	3,500
TILDEN PRECINCT	1,197	1,068	1,154	1,240	1,350	1,410	1,540
Tilden	906	808	909	950	1,060	1,190	1,280
WALSH PRECINCT	586	531	577	611	643	679	710
WINE HILL PRECINCT	481	442	398	370	388	400	420

APPENDIX C

INDUSTRIAL LAND AVAILABILITY
MADISON, ST. CLAIR, MONROE COUNTIES

MADISON COUNTY

435± acres	Madison County, Granite City, IL, one mile south of I-270 on Illinois Route 3 on the Chain of Rocks Canal. Served by the Illinois Terminal Railroad. Zoned: Industrial/Agricultural.
366± acres	West Madison County, Illinois Highway 111 near I-270. Utilities are close by, very flat topography. Frontage on two highways. Served by Chicago & Eastern Illinois and Penn Central Railroads. Zoned: Industrial.
190 acres	Madison County, Granite City, IL, one mile south of I-270 adjacent and east of Illinois Route 3. Served by the Illinois Central Gulf Railroad. Zoned: Agricultural.
151 acres	Central Madison County, IL Route 162 west of I-55-70. Will divide, water on property. Zoned: Agricultural.
138 acres	Central West Madison County, Mitchell, IL, on Route 203. Served by Penn Central and Illinois Central Gulf Railroads. Zoned: Agricultural.
135 acres	Madison County, Mitchell, IL, IL Route 203 and Poag Road. Served by Penn Central and Illinois Central Gulf Railroads. Zoned: Industrial.
135± acres	Madison County, Mitchell, IL, 5 miles north of I-270, adjacent and east of Illinois Route 111. Served by the Norfolk & Western Railroad. Zoned: Agricultural.
109 acres	Central Madison County, Edwardsville, IL. State Highway 157 across from SIU. Allows for warehouse, service buildings, etc. Zoned: B-2.
100 acres	Southwestern Madison County, Fourth Street in Venice, IL. All utilities. Served by the Terminal Railroad. Zoned: Industrial.
92 acres	Madison County, East Alton, IL, Highway 3. Excellent for commercial or industrial. Served by Penn Central, Illinois Terminal Railroads. Zoned: Industrial.

89 acres	Central Madison County, Troy, IL. IL Route 162 just east of I-55-70. Zoned: Agricultural.
46 acres	North Central Madison County, Hamel, IL. Illinois Highway 140 at I-55 Hamel Area. Visibility form I-55. All utilities, level. Zoned: Commercial.
36.4 acres	Madison County, Granite City, IL. River Road and North Street. Connected to Tri-City Port by rail. Served by Illinois Terminal Railroad. Zoned: Industrial.
30.5 acres	Southwestern Madison County, Granite City, IL. 1,100' frontage on Illinois Highway 3. All utilities, adjacent to A. O. Smith and Shasta Beverage plants. Served by the Illinois Terminal Railroad.
22 acres	Southwestern Madison County, 25th and Railroad Tracks, Granite City, IL. All utilities. Served by the Penn Central, Illinois Central Gulf, Norfolk & Western and Illinois Terminal Railroads. Zoned: Heavy Industrial.
22 acres	Madison County, Mitchell, IL. Just east of Alton and Southern tracks at IL Route 203, north of I-270. Served by the Alton and Southern Railroad. Zoned: Industrial.
19 acres	Southwestern Madison County, Rock Road and Highway 151, Granite City, IL, at Tri-City Regional Port. All utilities.
18.8 acres	Northeast Madison County, Livingston, IL. Old coal mine area-much coal slurry that can be used for fill. Served by the Penn Central Railroad. Zoned: Industrial.
14 acres	West Central Madison County, Mitchell, IL. I-270 and IL Route 3 Interchange. Zoned: B-3 Highway Commercial.
10 acres	Madison County, Collinsville, IL. Adjacent to K-Mart Store on U.S. Route 40. All utilities available. Zoned: Commercial.

8.5 acres	East Central Madison County, Marine, IL. I-70 & IL Route 4 Interchange. Site is located 400 feet north of I-70 Interchange with over 1,000 ft. frontage on IL Route 4. Zoned: B-3 Highway Commercial.
7 acres	Central West Madison County, Mitchell, IL. Just west of Alton and Southern tracks at IL Route 203 & I-270. Served by the Alton and Southern Railroad. Zoned: Industrial.
6.8 acres	Central Madison County, Edwardsville, IL. Route 157 near I-270. Located on Route 157, Northeast quadrant of I-270 Interchange at South Entrance road to SIU-Edwardsville Campus. Zoned: B-2 Commercial.
5 acres	East Central Madison County, Highland, IL. I-70 and IL Route 143 Interchange. Site is located at eastbound off ramp. Zoned: B-3 Highway Commercial.
4.3 acres	Southwestern Madison County, frontage road facing Highway 151, Granite City, IL, adjacent to Tri-City Regional Port. All utilities.
4 acres	East Central Madison County, Marine, IL. I-70 and IL Route 4 Interchange. Site is located on frontage road at westbound off ramp. Zoned: B-3 Highway Commercial.
4 acres	Central Madison County, Livingston, IL. IL Route 157 and I-270 SW Quadrant. Zoned: Highway Business.
3 acres	Northeast Madison County, Livingston, IL. I-55 off ramp southbound. Zoned: Highway Business.

ST. CLAIR COUNTY

200 acres	St. Clair County, near Fairview Heights, IL, Shiloh Road. 4,000 ft. frontage on Shiloh Road, all utilities available. Zoned: Open.

1 acre to 200 acres	Northwest St. Clair County, Cahokia & Sauget, IL. Railroad is available. Zoned: Commercial/Industrial. Served by the Missouri Pacific Railroad.
165 acres	St. Clair County, between Monsanto's and Phillips Petroleum's docks, Sauget, IL. Three-fourths (3/4) mile of frontage on the Mississippi River. Served by the Alton and Southern and the Illinois Central Gulf Railroads.
135 acres	Northeast St. Clair County, Fairmont City, IL. Vacant land with several rail spurs on site, will divide. Served by the Penn Central Railroad. Zoned: Heavy Industrial.
90 acres	St. Clair County, Illinois Route 3, Cahokia, IL. Fronting one mile on Route 3, depth from 800' to 900'. All utilities. Served by the Terminal Railroad.
0.5 acre to 80 acres	Northwest St. Clair County, Village of Cahokia, Bi-State Parks Airport, East St. Louis - Cahokia, IL. Non-aeronautical commercial-industrial sites adjacent to Airport. Served by the Missouri Pacific Railroad. Zoned: Airport.
80 acres	St. Clair County, on private road off Illinois Route 3, Cahokia, IL. Served by the Alton & Southern and the Terminal Railroads.
0.5 acre to 80 acres	Northwest St. Clair County, Village of Cahokia, Bi-State Parks Airport, East St. Louis - Cahokia, IL. Aeronautical commercial-industrial sites with airport access and use. Served by the Missouri Pacific Railroad. Zoned: Airport.
50+ acres	St. Clair County, East St. Louis, Mississippi River Front, west of Terminal R.R.'s #2 yard. Electric and water available. Served by the Terminal Railroad. Zoned: Industrial.
35 acres	North Central St. Clair County, Caseyville, IL. I-64 & IL 157 Interchange. Zoned: Commercial/Industrial.
17.7 acres	Northern St. Clair County, Route 50 and Highway 157 frontage road. Zoned: Highway Business.

17.5 acres	Northwest St. Clair County, SW Quadrant of U.S. 460 and IL 157. Water and electric on property. Zoned: Industrial.
13.6 acres	South St. Clair County, Freeburg, IL, U.S. Highway 460. All utilities on site. Served by the Illinois Central Gulf Railroad. Zoned: Industrial.
9.68 acres	St. Clair County, Smithton, IL. Frontage on IL 159. All utilities available. Close to U.S. 460. Zoned: Industrial.
6 acres	Northeast St. Clair County, I-64 & IL Route 4 Interchange. All four quadrants of I-64 & IL Route 4 Interchange - between Lebanon and Mascoutah, IL. Zoned: Highway Business.
6± acres	Northwest St. Clair County, East St. Louis,IL, 301 South Main Street. Site is improved with 85,000 sq. ft. industrial building which has value as salvage. Ready access to I-70. Served by the Illinois Central Gulf Railroad. Zoned: Industrial.
5 acres	St. Clair County, Belleville, IL. Corner of U.S. Route 460 and South 59th Street. Zoned: Commercial.
3.5 acres	Northwest St. Clair County, East St. Louis, IL. 1721 North 21st Street. Small brick office building on property. Zoned: Commercial.

MONROE COUNTY

955 acres	Northwest Monroe County, IL Route 3 and U.S. By-pass 50 (I-255), this land is south of By-pass 50, between Illinois Route 3 and the Mississippi River levee. All utilities are available. Served by the Illinois Central Gulf and the Missouri Pacific Railroads. Zoned: Agricultural.
750 acres	Northwest Monroe County. Either side of the Jefferson Barracks Bridge (U.S. By-pass 50). 7,600 ft. frontage on the Mississippi River-part of the proposed St. Louis harbor. Zoned: Agricultural.

648 acres	Monroe County, Waterloo, IL, adjacent to City of Waterloo. All utilities available, all or any part available, will build to suit. Served by the Illinois Central Gulf Railroad. Zoned: Agricultural.
300 acres	Monroe County, Waterloo, IL, 1½ mile south of Waterloo. All utilities available, all or any part available, will build to suit. Served by the Illinois Central Gulf Railroad. Zoned: Agricultural.
160 acres	Monroe County, Waterloo, IL, adjacent ot City of Waterloo. All utilities available, all or any part available, will build to suit. Served by the Illinois Central Gulf Railroad. Zoned: Agricultural.
100 acres	Monroe County, Northeast edge of Columbia, IL. Sewer and water available. Served by the Illinois Central Gulf Railroad. Zoned: Planned Light Industrial.
16 acres	Monroe County, West of Columbia, IL. Frontage on IL Route 3 By-pass. Zoned: Office.
4½ acres	Northwest Monroe County, Columbia, IL. 300 Rueck Street. Served by the Illinois Central Gulf Railroad. Will build for sale or lease. All utilities available. Zoned: Commercial.

Source: Saint Louis Regional Commerce & Growth Association, Current Listings, January, 1974.

APPENDIX D

BIBLIOGRAPHY

Candeub and Fleissig. Comprehensive Master Plan: Village of East Alton, Illinois. 1962.

De Chiara, Joseph, and Koppelman, Lee. Planning Design Criteria. New York: Van Nostrand Reinhold Company, 1969.

East-West Gateway Coordinating Council. Economic Study of the St. Louis Region. Land Use Component Technical Report 4. St. Louis, 1973.

_______. The 1995 Regional Land Use Plan for Metropolitan St. Louis. St. Louis, 1973.

Evert Kincaid and Associates, Inc. Comprehensive Village Plan: Brooklyn, Illinois. Chicago, 1960.

General Planning and Resource Consultants. Alton, Illinois: A Comprehensive Plan. St. Louis, 1970.

_______. Preliminary Comprehensive Plan: Columbia, Illinois. St. Louis, 1966.

_______. Preliminary Comprehensive Plan: Fults, Illinois. St. Louis, 1966.

_______. Preliminary Comprehensive Plan: Hecker, Illinois. St. Louis, 1966.

_______. Preliminary Comprehensive Plan: Maeystown, Illinois. St. Louis, 1966.

_______. A Comprehensive Long-Range Development Plan: Monroe County, Illinois. St. Louis, 1967.

_______. Preliminary Comprehensive Plan: Valmeyer, Illinois. St. Louis, 1966.

_______. A Comprehensive Community Plan: Waterloo, Illinois. St. Louis, 1967.

Harland Bartholomew and Associates. Environmental Study, Locks and Dams No. 26 (Replacement), Upper Mississippi River Basin, Mississippi River - Alton, Illinois. St. Louis, 1974.

_______. Comprehensive Plan: Centreville, Illinois. St. Louis, 1965.

Illinois State Employment Service. Area Manpower Review. East St. Louis, September, 1971 through March, 1974.

Ladislas Segoe and Associates. Comprehensive Master Plan: Cahokia, Illinois. Cincinnati, 1966.

Mills, Edwin S. Urban Economics. Glenview, Illinois: Scott, Foresman and Company, 1972.

Morton Hoffman and Company. "Demographic and Economic Trends, St. Louis Metropolitan Region and Sub-areas." Unpublished. Baltimore, Maryland, 1972.

Parsons, Brinkerhoff, Grotz and Eric Hill. Comprehensive Areawide Railroad Consolidation and Relocation Study, St. Louis Region - Executive Summary. St. Louis, 1974.

Regional Industrial Development Corporation. St. Louis Regional Labor Market: A Skill and Availability Survey. St. Louis, 1967.

Southwestern Illinois Metropolitan and Regional Planning Commission. Belleville Survey and Analysis. Collinsville, 1973.

________. Community Development Plan - Caseyville. Collinsville, 1972.

________. Community Plan: Village of Caseyville, Illinois. Collinsville, 1973.

________. Collinsville Comprehensive Land Use Plan Update. Collinsville, 1973.

________. A Community Development Plan, Dupo. Collinsville, 1968.

________. A Comprehensive Community Plan, Edwardsville. Collinsville, 1969.

________. Guide for Community Growth and Development, City of Fairview Heights. Collinsville, 1972.

________. Inventory and Analysis, City of Fairview Heights. Collinsville, 1972.

________. A Long Range Development Plan, Fayetteville. Collinsville, 1968.

________. A Comprehensive Community Plan for Freeburg. Collinsville, 1969.

________. Community Development Plan: Glen Carbon, Illinois. Collinsville, 1974.

________. A Long-Range Development Plan: Granite City. Collinsville, 1968.

_______. A Community Development Plan, Hamel. Collinsville, 1969.

_______. A Comprehensive Community Plan - Madison. Collinsville, 1969.

_______. A Comprehensive Community Plan - Marissa. Collinsville, 1970.

_______. A Comprehensive Community Plan - Maryville. Collinsville, 1969.

_______. A Comprehensive Community Plan - City of Mascoutah. Collinsville, 1969.

_______. Community Plan: Village of New Baden, Illinois. Collinsville, 1973.

_______. A Comprehensive Community Plan for O'Fallon. Collinsville, 1969.

_______. O'Fallon Community Plan. Unpublished. Collinsville, 1974.

_______. A Comprehensive Development Plan, Roxana. Collinsville, 1970.

_______. Community Development Plan - Swansea. Collinsville, 1972.

_______. Community Plan: Village of Swansea, Illinois. Collinsville, 1973.

_______. A Comprehensive Community Plan, Venice. Collinsville, 1969.

_______. A Comprehensive Community Plan for Wood River. Collinsville, 1968.

_______. Madison County Plan. Collinsville, 1969.

_______. St. Clair County Plan. Collinsville, 1969.

_______. Transportation - Circulation Survey and Analysis, Madison and St. Clair Counties, Mo. P-140. Collinsville, 1969.

_______. Housing Conditions, Needs and Programs in Madison, St. Clair and Monroe Counties. St. Louis, Missouri: East-West Gateway Coordinating Council, 1970.

_______. Land Characteristics Study, St. Clair County. Collinsville, 1970.

_______. Population and Economic Base Study. For Southwestern Illinois Metropolitan and Regional Planning Commission by Hallauer and McReynolds, 1970.

_______. An Evaluation of the Potential of Land for Urban Development in Madison, St. Clair and Monroe Counties. Collinsville, 1971.

_______. General Soils Information and Intrepretation, Madison County. Collinsville, 1970.

________. Park and Recreation Inventory and Analysis, Madison, St. Clair and Monroe Counties. Collinsville, 1971.

________. Park and Recreation Plan, Madison, St. Clair, Monroe and Randolph Counties. Collinsville, 1972.

________. Water-Sewer Inventory and Basic Data Collection, Madison, St. Clair and Monroe Counties, Phase I. Collinsville, 1971.

________. Water and Sewer Facilities Planning Program for Madison, St. Clair, and Monroe Counties, Water and Sewer Systems Analysis, Phase II. Collinsville, 1972.

________. Water and Sewer Facilities Plan, Madison, St. Clair and Monroe Counties, Phase III. Collinsville, 1973.

________. Open Space and Historic Sites Preservation Study: Madison, St. Clair, Monroe and Randolph Counties. Collinsville, 1973.

________. Everything You Always Wanted to Know About Metro-East But Didn't Know Who to Ask. Collinsville, 1973.

________. Background Survey, Surface Drainage Program, Madison, St. Clair, Monroe and Randolph Counties, Illinois. Collinsville, 1973.

________. Overall Economic Development Program, Madison County, Illinois. Collinsville, 1973.

________. Madison County Regional Plan (Map). Collinsville, 1974.

________. Proposed Chapel Spring Planned Unit Development Plan and Rezoning Application, 1974. Southwestern Illinois Metropolitan and Regional Planning Commission and Monroe County Planning Commission Land Use Committee.

U.S. Department of Commerce, Bureau of the Census. United States Census of Population, 1950, 1960 and 1970.

________. United States Census of Population: General Social and Economic Characteristics, 1950, 1960 and 1970.

________. Census of Agriculture, 1964 and 1969.

________. County Business Patterns, 1962 and 1972.

________. OBERS. "Series 'E' Employment Projections." Unpublished.

________. U.S. Industrial Outlook, 1974 with Projections to 1980. 1973.

U.S. Department of the Interior, National Park Service. East St. Louis Riverfront, Suitability - Feasibility/Alternatives.

U.S. Department of Transportation, Federal Aviation Administration. Environmental Impact Statement Pursuant to Section 102(2)(c), P.L. 91-190. Draft submitted by the St. Louis Metropolitan Area Airport Authority, 1972.

Urban Land Institute. The Community Builders Handbook. Washington, D.C., 1968.

UNIVERSITY OF ILLINOIS-URBANA
3 0112 120227860